

Sustainability Advisory Council: UW-Madison Strategic Sustainability Plan

DRAFT Report

August 9, 2021

Executive Summary

Introduction

Despite its impressive legacy of prominent environmental figures, the University of Wisconsin–Madison has lost its standing as a leader in sustainability. The Sustainability Advisory Council (SAC), under the direction of its executive sponsors, identified strategic failures and achievement gaps that have limited the institution's advancement in this critical field. The SAC's findings, outlined in this report, illuminate a pathway for sustainability leadership at UW–Madison. To advance among its peer universities and to ensure a liveable planet now and in the future, UW–Madison must integrate sustainability into its diverse and thriving campus culture, its world-class educational and research enterprises, and its practice of operational excellence.

Background and Recommendations

The Sustainability Advisory Council was chartered by the Provost and the Vice Chancellor for Finance and Administration to provide recommendations on how to align the university's mission, current campus strategic plans, and the Second Nature Resilience Commitment to advance sustainability at UW–Madison. Composed of campus leadership, shared governance, and students, the SAC met monthly from October 2020 through May 2021. The Office of Sustainability, which managed the SAC, also convened six public listening sessions to gather feedback on current campus sustainability performance as well as the SAC's progress.

By the end of its first year, the SAC developed a strategic framework for sustainability and a list of recommendations and prioritized action groups for consideration by the project sponsors. The strategic framework articulates three institutional domains for sustainability leadership at UW–Madison:

- 1. Our culture: making sustainability principles part of our day-to-day interactions, operations, and decision-making
- 2. Our purpose: elevating sustainability as a discipline, supporting collaborative research, and expanding learning opportunities
- 3. Our practice: "walking the talk" with policies, procedures, and systems that build a sustainable university

The SAC organized its recommendations within these three domains. Specific recommendations were developed based on a review and gap analysis of UW–Madison's 2019 Sustainability Tracking, Assessment, and Rating System (STARS) report (see Appendix 5.d); consideration of the unifying values that bracketed SAC discussions (see Section 1.d); Office of Sustainability staff experience; feedback from the public listening sessions; and input from SAC members.

Table 1, below, provides a summary of the SAC's initial recommendations, categorized within their institutional domains. **These recommendations are intended to define a pathway to sustainability leadership at UW–Madison.** To provide specificity and logistical detail, the SAC also identified example initiatives and action items that would enable the recommendations to be fulfilled through the creation of action groups (see Appendix 5.f).

Our Culture Behavioral / Procedural Norms	Our Purpose Research and Education	Our Practice University Operations
Make sustainability principles part of our day-to-day interactions, operations, and decision-making	Elevate sustainability as a discipline, support collaborative research, and expand learning opportunities	"Walk the talk" with policies, procedures, and systems that build a sustainable university
Recommendations:		
Integrate sustainability into the culture of campus decision-making	Establish a distinctive home for sustainability research, education, and operations	7. Plan and design for a sustainable and regenerative university
2. Center social sustainability in all programs to support diversity, equity, inclusion, and access	5. Champion sustainability research6. Expand sustainability learning opportunities and	8. Pursue carbon neutrality9. Achieve zero waste10. Build and operate a
3. Recognize UW–Madison as a leader in sustainability	collaborations	sustainable campus

Table 1. Framework, Definitions, and Recommendations

Prioritization and Next Steps

Though immediately implementing all the SAC recommendations would have the greatest sustainability impact at UW–Madison, resource constraints, logistics, and sequencing considerations point toward a selected subset of recommendations for initial roll-out.

The SAC therefore asks that the recommendations be approved as the UW–Madison Sustainability Strategy and the proposed seven action groups (Table 2) approved as the preliminary implementation methodology. Action Groups will be composed of subject matter experts, student representatives, and other necessary partners to ensure that implementation of this prioritized subset of recommendations can move forward smoothly and efficiently.

Action Group	SAC Priority	Selection Rationale
Integrate Sustainability	Culture: Integrate sustainability into the culture of campus decision-making	Enables future programs or projects
Center Social Sustainability	Culture: Center Social Sustainability in all programs to Support Diversity, Equity, Inclusion, and Access	Enables future programs or projects
Expand Sustainability Learning	Purpose: Expand sustainability learning opportunities and collaborations	Enables future programs or projects Builds upon existing programs
Champion Sustainability Research	Purpose: Champion Sustainability Research	Enables future programs or projects Builds upon existing programs
Achieve Zero Waste	Practice: Achieve zero waste	Builds upon existing programs
Create Sustainable Facilities and Infrastructure	Practice: Plan and design for a sustainable and regenerative university; Practice: Build and operate a sustainable campus	Builds upon existing programs
Pursue Carbon Neutrality	Practice: Pursue carbon neutrality	Builds upon existing programs

Neutrality
Table 2. Action Groups

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1. Process

1.a. **Background & Urgency**

The Sustainability Advisory Council (SAC) was chartered by the Provost and the Vice Chancellor for Finance and Administration (VCFA) in order to provide recommendations on how to align the university's mission,¹ current campus strategic plans,² the Second Nature Resilience Commitment³ to advance sustainability at UW–Madison.

The impetus for the SAC derived, in part, from the results of the university's 2019 Sustainability Tracking, Assessment & Rating System (STARS) report,⁴ for which UW–Madison received a "Silver" rating. While respectable for an inaugural STARS report, the majority of Big 10 and other peer institutions have received at least a "Gold" rating. The creation of the SAC also fulfill important aspects of resolutions passed by campus governance bodies including, but not limited to, Faculty Senate Document 2699⁵, Academic Staff Assembly Document 666⁶, and ASM Legislation 24-0123-03⁷.

1.a.1 Defining Sustainability

Global frameworks for the concept of sustainability include The Bruntland Commission, Earth Charter, and the United Nations Sustainable Development Goals. The SAC pursued its work within the context of these frameworks, with the qualification that any inclusive definition of sustainability must encompass "human and ecological health, social justice, secure livelihoods, and a better world for all generations." Moreover, while mainstream scholars and institutes of higher education have contributed to the evolving definition of sustainability, Indigenous knowledge is equally important to scholarly and/or scientific methodologies in addressing sustainability challenges. Implementation of the SAC recommendations therefore should be actively informed by this knowledge when possible and Action Groups should seek collaboration with Native Nations_UW, the Wisconsin Tribal Conservation Advisory Council, and other communities as appropriate.

UW-Madison is also part of the UW System, which states that its sustainability efforts are intended "[t]o cultivate a sustainable future, and to fulfill the UW System mission of educating people and improving the human condition." Specifically, "students, staff, and faculty across UW System work to:

¹ https://www.wisc.edu/about/mission/

² https://strategicframework.wisc.edu/

³ https://sustainability.wisc.edu/strategic-initiatives/resilience-commitment/

⁴ https://reports.aashe.org/institutions/university-of-wisconsin-madison-wi/report/2019-08-01/

⁵ https://dbmfwipzwwbdx.cloudfront.net/wp-content/uploads/sites/29/2018/12/Fac-Senate-Climate-Change-Resolution2.pdf

⁶ https://dbmfwipzwwbdx.cloudfront.net/wp-content/uploads/sites/29/2018/12/Academic-Staff-Resolution.pdf

⁷ https://dbmfwipzwwbdx.cloudfront.net/wp-content/uploads/sites/29/2019/11/24-0123-03-Resolution-Calling-for-Climate-Action-Plan-2.pdf

⁸ http://www.un-documents.net/wced-ocf.htm

⁹ https://earthcharter.org/read-the-earth-charter/

¹⁰ https://sdgs.un.org/goals

 $^{^{11} \} https://stars.aashe.org/resources-support/help-center/the-basics/what-issustainability/\#: \sim: text = AASHE \% 20 defines \% 20 sustainability \% 20 in \% 20 a, objectives \% 20 at \% 20 the \% 20 campus \% 20 level$

¹² http://nativenations.nelson.wisc.edu/

¹³ https://www.wtcac.org/

- Develop a shared ethic of responsibility for people and the planet;
- Fulfill our obligations to sound environmental practices that ensure ecosystem resilience and diversity;
- Support just, equitable, and diverse communities across the state, country, and world;
- Pursue innovative sustainability solutions for UW System that are grounded in systems thinking; and
- Balance long-term considerations with near-term urgency in all decision making processes."¹⁴

References to sustainability throughout these recommendations are meant to embody an inclusive definition of the term, as described above, and to accommodate the unique goals of a statewide, public, higher education system as articulated by the UW System.

1.b. Membership & Subcommittee

The Office of the Provost, the VCFA, and the Office of Sustainability (OS) selected SAC members representing all university functions, with an emphasis on those areas with the biggest sustainability achievement gaps as identified in the STARS report. Shared governance bodies each followed their own procedures for selecting their representatives. Final composition of the SAC (see Appendix 5.a) was informed by feedback received from the campus community.¹⁵

The Associated Students of Madison (ASM) and Campus Leaders for Energy Action Now (CLEAN) provided additional feedback, which resulted in the addition of two student seats on the SAC as well as an all-student subcommittee. Student members for both the SAC and student subcommittee were selected via an application process led by representatives from ASM and the OS. The student subcommittee completed a report documenting their work, which is included in Appendix 5.b.

1.c. Process & Methodology

After the OS established SAC and subcommittee membership, campus sustainability recommendations were developed through the following process:

1. Kick off Sustainability Advisory Council and Student Subcommittee

After introductory remarks by Lieutenant Governor Mandela Barnes, Provost Karl Scholz, and Vice Chancellor Laurent Heller, the work of the SAC began in Fall 2020.

2. Define Unifying Values

The SAC defined unifying values that would shape its development of sustainability strategy as well as guide the implementation of associated initiatives.

3. Hold First Set of Listening Sessions

The first set of public listening sessions sought input from university and community members on the structure and expected outcomes of the SAC.

¹⁴ https://www.wisconsin.edu/sustainability/

¹⁵ https://sustainability.wisc.edu/follow-the-stars-survey/

4. Develop Focus Areas and Map Potential Solutions

Focus Areas represent broad categories of sustainability issues; they were defined by a review of peer best practices, results of UW–Madison's STARS report, Office of Sustainability staff experience, and feedback from the campus community during public listening sessions. Each Focus Area was matched with the campus-specific issues they addressed as well as potential solutions.

5. Prioritize Focus Areas

Following facilitated discussions, SAC members ranked each Focus Area in order of importance; individual rankings were averaged to develop a preliminary prioritization of all Focus Areas (see section 2.c).

6. Hold Second Set of Listening Sessions

The second set of public listening sessions sought feedback from university and community members on the preliminary prioritization of the Focus Areas.

7. Deliver Recommendations

Based upon the Focus Area prioritization process, feedback from the student subcommittee, feedback received during the listening sessions, and a review of the 2010 Sustainability Initiative Task Force Report, ¹⁶ the SAC summarized its work into a set of recommendations within the categories of our culture, our purpose, and our practice.

 $^{^{16}\} https://dbmfwipzwwbdx.cloudfront.net/wp-content/uploads/sites/29/2017/03/sustainability_taskforce-report_10oct2010_web1.pdf$

Develop Focus Areas Organize into **Prioritize** Visions and **Focus Areas** STARS & **Priorities** Peer Best **Practices** Office of Focus Area Sustainability #1 Listening Sessions Focus Area #2 Members Focus Area #3 Focus Area #4 Focus Focus Areas Areas Focus Focus

Figure 1 shows the process by which the campus sustainability recommendations were developed:

Figure 1. SAC Process

1.d. Unifying Values

Areas

The SAC defined a set of unifying values to guide its development of sustainability priorities and the implementation of related programs and projects. These values were intended to situate the work of the SAC in the specific context of UW–Madison and to ensure that sustainability recommendations dovetailed with a full range of institutional priorities. Accordingly, the SAC also developed language to articulate the degree to which a program or project might align with a given unifying value (e.g. "low" or "high" alignment). See Table 3, below.

While some programs or projects more strongly align with certain unifying values than others, all of the unifying values should be considered during the development of specific action plans.

Table 3 shows the unifying values created by the SAC.

Areas

Unifying Value	Description	Definition of Low Alignment	Definition of High Alignment
Strategic Vision	Align with the University's Strategic Framework, including Our Vision; support the University's core Mission related to teaching, research and service	Indirectly related or unrelated to the Strategic Framework and/or outside the scope of Our Vision and core Mission	Directly advances three or more strategic priorities from the University's Strategic Framework
Institutional Collaboration	Implement sustainability initiatives that engage all areas of the institution in a holistic and collaborative capacity	Priority focused on one department, school, college, or institute	Priority requires collaboration across units, engaging at least one academic, research, and operational unit
Equity, Inclusion, Diversity	Support the University's prioritization of equity, inclusion and diversity as well as our obligations to sovereign Native nations in the state now known as Wisconsin	Limited or potentially negative impact on equity, inclusion, and diversity goals from the Diversity Framework	Directly advances at least two equity, inclusion, and diversity goals from the Diversity Framework
Wisconsin Idea	Implement sustainability initiatives whose influence extends beyond the classroom, and campus.	Priority impacts campus only	Priority creates impact beyond campus, leveraging UW-Madison's national profile
Athletics	Incorporate sustainability into Athletic operations, events, and national communications	Limited or no impact on athletics	Directly integrates into athletics operations, events, and communications
Ecosystems	Support and develop regenerative ecosystems on University-owned property and in the surrounding community	Limited or potentially negative impact on regenerative ecosystems	Directly supports or develops regenerative ecosystems
Public Health & Wellness	Advance public health and wellness on campus and in the surrounding community	Limited or potentially negative impact on campus and community public health and wellness	Directly improves campus and community public health and wellness
Graduate Preparedness	Ensure that all UW-Madison graduates, regardless of degree received, understand how the work they do and the lives they lead can contribute to a sustainable world	Limited or no impact on UW-Madison graduates	Directly prepares UW- Madison graduates to contribute to a sustainable world
Fiscal Responsibility	Consider short, medium, and long- term fiscal impacts when assessing sustainability initiatives	Positive impact is only realized in the short, medium, or long-term	Positive impact is realized in the short, medium, and long-term
Reputation	Expand the institution's efforts in sustainability-related research and education while elevating its profile as a sustainability leader in higher education	Little to no impact on institutions' profile	Positive impact on institution's profile with a focus on the impact beyond campus
Innovation & Technology	Determine pathways for the trial of scalable innovations in new technologies, in order to foster technology transfer, improve affordability, improve campus infrastructure, and reduce operational costs	Does not support the trial of new technologies	Enables the trial of new technologies to support technology transfer

Table 3. Unifying Values

1.e. Listening Sessions and Surveys

Two sets of three public listening sessions provided a forum for members of the public and campus community to provide feedback on the process and outcomes of the SAC.

The first set of listening sessions included a short introduction outlining the SAC process along with a story illustrating how UW–Madison might take a systems approach to sustainability. The majority of the time was devoted to small group discussions (~5 attendees) reflecting on two questions:

- 1. Imagine that UW-Madison is doing everything right when it comes to sustainability. Now it is 2035, what is different?
- 2. In order to achieve the vision we just discussed, what are the most important sustainability priorities for the university to consider?

The second set of listening sessions was held after the SAC developed prioritized Focus Areas (see section 2.c). These listening sessions included a short introduction summarizing the work of the SAC, the STARS categories, and the prioritized Focus Areas. The majority of the time was devoted to group discussions organized around the four STARS categories. In each group attendees responded to three questions:

- 1. What do you like about the SAC's prioritized Focus Areas?
- 2. What don't you like about the SAC's prioritized Focus Areas?
- 3. What would you change about the SAC's prioritized Focus Areas?

Summaries of the outcomes of each set of listening sessions are included in Appendix 5.c.

As an additional opportunity for input, the SAC released a total of five surveys. Two surveys asked the same questions as the listening sessions, while the other three solicited feedback on the preliminary prioritization of Focus Areas. Surveys were distributed to an email list including all listening session attendees as well as others who opted-in to receiving SAC updates. Links to the surveys were also posted to the SAC website. Results were shared with SAC members during meetings and in listening session summaries.

2. Recommendations

2.a. Focus Area Inventory

Focus Areas represent broad categories of sustainability issues to be addressed across campus. The SAC developed Focus Areas via a review of peer best practices and results of UW-Madison's STARS report (see Appendix 5.d), Office of Sustainability staff experience, feedback from the campus community during public listening sessions, and input from SAC members.

To support review and discussion by SAC members and the campus community, the Focus Areas were grouped into four categories that align with the structure of the STARS report:

- 1. Academics & Research (Table 4)
- 2. Engagement (Table 5)
- 3. Operations (Table 6)
- 4. Planning and Administration (Table 7)

Source(s) of Focus Areas are identified in the tables below by the following:

= STARS & Peer Best Practices

Office of Sustainability Experience

! = Listening Sessions

= SAC Members

Tables 4-7 list the Focus Areas along with the associated issues they would address; example initiatives that could respond to those issues; and example action items to build out the initiatives. SAC members used these tables to guide initial discussion of sustainability priorities.

Focus Area	Issue(s) to Address	Example Initiative(s)	Example Action items
Sustainability Research	UW-Madison lacks systems to identify and track sustainability-related research. UW-Madison lacks incentives for faculty/staff to pursue sustainability-related research.	Criteria that define sustainability-related research Processes to track and report sustainability-related research Faculty/staff incentives to engage in sustainability-related research.	 Implement a Sustainability "checkbox" in WISER Collaborate with Academic Analytics on a methodology for identifying sustainability research Incorporate sustainability-related research incentives into promotion and/or tenure decisions Incorporate sustainability-related research incentives into the selection of named professorships Develop a sustainability research communications strategy Calls for proposals from the Office of the Vice Chancellor for Research and Graduate Education and WARF that support sustainability projects
Campus as a Living Lab ¹⁷ ★	UW-Madison lacks systems for faculty/staff to collaborate with campus operations experts. UW-Madison lacks incentives for teaching and research faculty/staff to collaborate with campus operations experts.	Processes to identify operations experts and to connect them with faculty/staff with related interests. Funding opportunities to support faculty/staff use of campus resources in their courses and research. Professional development funding and dedicated time for campus operations experts to collaborate with faculty/staff.	 Develop an inventory of campus resources and operations experts and processes for facilitating and executing campus as a living lab course work and research Create funding for research and teaching to use the campus as a living lab Create training for academic and university staff to participate in campus as a living lab activities Create resources and funding for supervisors to support campus operations experts in devoting time to campus as a living lab activities Calls for proposals from the Office of the Vice Chancellor for Research and Graduate Education and WARF that support projects utilizing campus facilities for research/teaching
Sustainability Faculty	UW-Madison needs more faculty/staff who focus their research and teaching on sustainability issues.	Hiring and retention programs to support faculty who focus their research and teaching on sustainability.	Submit a cluster hire proposal for three faculty members: one in environmental, one in social, and one in economic sustainability
Sustainability Institute	UW-Madison lacks an institute for sustainability research, teaching, operations, events, and fundraising.	Sustainability Institute to provide a home for faculty, staff, students, and community members who wish to pursue sustainability-related endeavors.	 Develop a plan for an institute, seeking consensus from stakeholders and how to align with existing centers and institutes Find funding for plan, e.g., from granting agencies or from donors

¹⁷ Campus as a living lab is the practice of utilizing campus "infrastructure and operations as living environments for multidisciplinary learning and applied research" (STARS Technical Manual, Version 2.2, available here: https://stars.aashe.org/wp-content/uploads/2019/07/STARS-2.2-Technical-Manual.pdf).

Focus Area	Issue(s) to Address	Example Initiative(s)	Example Action items
Sustainability Courses	UW-Madison faculty/staff are missing opportunities to offer courses that relate to sustainability in degree programs, in certificates, and in courses that fulfil general education requirements. UW-Madison lacks incentives for faculty/staff to incorporate sustainability issues into their courses.	Incentives to support faculty/staff in incorporating sustainability in new and existing courses that fulfil requirements.	 Assess courses receiving sustainability attribute for achievement of sustainability learning outcomes Develop and offer training for faculty on how to incorporate sustainability learning outcomes into courses (based upon results of assessment) Organize mentors and/or a Community of Practice to support faculty/staff in sustainability curriculum development Incorporate recognition of offering sustainability-related courses into promotion and/or tenure decisions Incorporate recognition of offering sustainability-related courses into the selection of names professorships Offer grants to faculty to develop new, or expand existing, courses that include sustainability learning outcomes
Sustainability Learning Requirement	UW-Madison students can complete their degree program without participating in a learning activity (i.e., course or co-curricular activity) that incorporates sustainability issues.	Campus-wide requirement that students participate in at least one form of sustainability learning.	 Develop sustainability-related co-curricular activity inventory and process for confirming student participation Require all students to participate in a sustainability-related co-curricular activity before graduation
Honors & Recognition	UW-Madison misses opportunities to honor and recognize sustainability achievements by students, faculty, and staff.	Chancellor's award for sustainability achievement	 Develop criteria for selection of, and organize celebration for award recipients (individuals or teams) Include sustainability as a topic area in the annual teaching and learning symposium

Table 4. Academic & Research Focus Areas

Focus Area	Issue(s) to Address	Example Initiative(s)	Example Action items
Sustainability Leadership and Advocacy	As an institution, UW-Madison does not: • take part in direct advocacy efforts toward sustainability-related public policy issues • lead regional or national sustainability initiatives in higher education	Alignment and engagement of students/faculty/staff as advocates for sustainability-related public policy issues that support UW-Madison's mission Collaborations across the UW-System and Big10 to share best practices, provide leadership to address policy barriers, and implement regional sustainability initiatives	 Join the University Climate Change Coalition (UC3) Advise the State's Office of Sustainability and Clean Energy on Department of Administration on impacts of sustainability policies on UW-Madison and UW System Develop resources for supporting student advocacy (e.g., mentoring, presentation reviews, etc.) Formalize UW System STARS best practices and peer review processes Lead new regional collaborations following the Midwest Climate Summit Organize and sponsor regional meet-ups at sustainability conferences (e.g., AASHE)
Sustainability Communication s and Branding	UW-Madison has insufficient:	Coordinated approach to sustainability communications that encompasses the breadth of campus and involves a variety of communicators Sustainability Forum to share and discuss issues in sustainability	 Incorporate a theme of sustainability into campus-level communications Develop a sustainability communicators group Create a network of ambassadors who promote sustainability across the campus community Deploy an annual survey to assess awareness of sustainability efforts Create in-building and landscape sustainability signage and deploy consistently across campus Hold an annual sustainability forum Expand the Sustainability Community of Practice Incorporate sustainability progress updates with external advisory boards
Sustainable Events	UW-Madison lacks requirements for incorporating sustainability into on-campus events	Policies for improving the sustainability of campus events	 Require zero waste events Prioritize sustainable procurement options in event planning Incentive sustainable transportation options and/or virtual participation options Ensure all events offer fair trade products Sustainability tag in campus events calendar
Sustainable Athletics	UW-Madison lacks requirements for incorporating sustainability into athletic events	Sustainability requirements for Recreation and Wellbeing athletic operations and events Sustainability plan for Athletics operations, events, and communications	 Hold zero waste athletic events Develop sustainability themed athletic communications Incorporate student athletes into sustainability communications Identify athlete sustainability leaders Lead Big10 Athletics sustainability initiatives

Focus Area	Issue(s) to Address	Example Initiative(s)	Example Action items
Alumni Engagement	UW-Madison and the Wisconsin Alumni Association have not fully leveraged sustainability to engage alumni	Engagement of alumni in sustainability programs, successes, and opportunities Development opportunities for alumni to donate to sustainability efforts	 Engage alumni to support new student recruitment to sustainability-related programs Developed sustainability focused alumni career panels and events Engage alumni as donors to sustainability initiatives Regular sustainability related communications in alumni outlets Alumni events focused on sustainability issues
Continuing Education	UW-Madison lacks a robust suite of sustainability-related continuing education courses	Coordinated outreach and advertising efforts of sustainability-related continuing education courses/programs Incentives to support faculty/staff in incorporating sustainability in new and existing continuing education courses	 Collaborate with UW-Extension on expanding sustainability-related continuing education opportunities Coordinate communications on sustainability-related continuing education Offer grants to faculty to develop new, or expand existing, continuing education courses that include sustainability learning outcomes
Sustainability Co-curricular Learning	 UW-Madison lacks: dedicated personnel to develop and coordinate sustainability-related co-curricular learning opportunities a method to connect these opportunities to foster growth and collaboration 	Department-level personnel tasked with fostering co-curricular learning opportunities Hub for co-curricular sustainability activities and student organizations	 Train career and academic advisors on sustainability co-curricular and career opportunities Develop a community of practice for sustainability student organization leaders Create a physical space on campus for sustainability student organizations Add sustainability to the leadership certificate for graduates Incorporate sustainability into Athletics life skills training Designate the Office of Sustainability as a potential administrative home for student organizations

Focus Area	Issue(s) to Address	Example Initiative(s)	Example Action items
Sustainability Onboarding and Training	UW-Madison does not include information on campus and community sustainability in student/faculty/staff orientation and onboarding UW-Madison does not offer or incentivize training to faculty/staff on sustainability issues related to their career	Sustainability presentation during SOAR, graduate student orientation, and employee onboarding Training and professional development courses for faculty/staff	 Include a sustainability walking tour and/or add sustainability topics to campus tours Include a sustainability presentation during SOAR Develop sustainability materials for distribution during graduate student orientation Require a sustainability focused video-based training for all students Develop sustainability materials for inclusion in all employee onboarding Include campus and community sustainability in New Employee Orientation Include sustainability in all new employee orientation Develop UW-Madison specific sustainability training opportunities Support external sustainability training opportunities

Table 5. Engagement Focus Areas

Focus Area	Issue(s) to Address	Example Initiative(s)	Example Action items
Sustainable Planning & Design	UW-Madison does not have a consistent methodology for incorporating sustainability into campus planning and building design	DFDM sustainability guidelines and processes that prioritize learning and knowledge while pursuing industry leading sustainable design Processes for incorporating applied research and technology transfer into new planning and new building design	 Design spaces for learning beyond the classroom (interior & exterior) Establish metrics for the social and educational sustainability objectives on new building design Expand green roofs & green infrastructure Expand adaptable spaces that accommodate evolving pedagogies and research Design for future climate (building & grounds) Develop more rooftop solar Incorporate assessment and research to continuously evaluate and inform the process Expand water efficient fixtures Pursue net zero energy & net zero carbon buildings Develop program for building sustainability tracking that could incorporate third party building certifications (LEED, WELL, etc.)

Focus Area	Issue(s) to Address	Example Initiative(s)	Example Action items
Sustainable Buildings	UW-Madison lacks comprehensive requirements for incorporating sustainability practices and principles into building operations and maintenance	Consistent, multi-attribute building operations policy that at a minimum addresses water use, energy use, product sourcing, and indoor air quality Trained staff to support implementation of, and reporting on, operations policy Expanded artistic and cultural attributes of buildings to engender creativity and create areas of respite	 Add assessment of classroom spaces into end of semester evaluations Develop green cleaning plan Develop an Inclusivity Committee to evaluate and review existing spaces and practices Develop building energy and water use benchmarking and reduction plan Develop color, lighting and air quality standards that prioritize learning, wellbeing, and equity, and are easily maintained. Develop indoor air quality management plan that includes proactive monitoring Develop program for building operations sustainability tracking that could incorporate third party certifications (LEED O+M, EnergyStar, etc.) Require energy metering for all buildings Create a public sustainability dashboard that includes social and environmental facility attributes
Sustainable Landscape Management	UW-Madison does not have a consistent methodology for incorporating sustainability practices into landscape management	Campus-wide integrated pest management (IPM) program that at a minimum addresses native plantings, minimal pesticide use, and less grounds keeping Landscapes designed for carbon sequestration	 Implement IPM program for main campus and athletics Develop more tree canopy and accessible green space Complete Bee campus certification Complete Tree Campus certification Develop exterior lighting standards for wildlife corridors, proximity to the lakeshore, and trespass into residence halls Re-establish the natural pharmaceutical garden at Pharmacy in collaboration with CALS

Focus Area	Issue(s) to Address	Example Initiative(s)	Example Action items
Sustainable Transportation	UW-Madison has untapped opportunities to be a national leader in sustainable transportation services and further reduce GHG emissions	Plans for long-term teleworking and how wellbeing and inclusivity will drive resources for the movement of people and services Green fleet plan to reduce fuel use and emissions Green travel guidance and carbon offset purchasing systems	 Expand inclusivity through addition of tricycles in the bike share program Add racks/lockers for longboards Install additional electric vehicle charging stations Limit new parking facilities Develop interactive maps of fitness routes, historical tours, art and the modes available to access them Offer an interactive map of commuter resources Implement an anti-idling policy Develop processes for investing in local projects for carbon offsets
Green Energy and Electricity	Sustainable energy use at UW-Madison is limited by: Natural gas powered district heating and cooling Low per unit costs for electricity from MGE	Incorporate human rights considerations in all energy sourcing Procure 100% renewable electricity and source net zero carbon energy	 Expand participation in MGE's Renewable Energy Rider program Participate in the MGE Green Power Tomorrow program Evaluate opportunities to convert heating and cooling plants to renewable fuels Purchase carbon offsets Commit to energy procurement guidelines that incorporate human rights benchmarks
Resource Management	Sustainable resource management at UW-Madison is limited by: • Landfill and resource collection and materials are being managed by several units on campus • Inconsistent signage and disposal requirements • Lack of procurement requirements on resource recovery and packaging	Zero waste plan for the main campus Use of life cycle cost analysis in procurement standards	 Centralize waste reporting Require waste reporting for all capital projects Enforce zero waste planning and execution guidelines for events Write procurement policies that limit package waste and prioritize recyclable products True cost allocation of waste and resource services across campus

Focus Area	Issue(s) to Address	Example Initiative(s)	Example Action items
Sustainable Food	Sustainable food systems at UW-Madison are limited by: • Food sourcing being managed by two separate units • Limited options for food disposal or recovery	Established institutional definition of local food and plan for increasing procurement Robust, standardized food recovery system for campus events	 Provide more local food options Increase sustainably certified food options Increase non-meat-based food options Develop institutional standards for food recovery Coordinate food sourcing from on-campus farms / gardens Develop a sustainability-themed food outlet on campus Increase food purchases from minority- and womenowned businesses Participate in Real Food Challenge Participate in the Cool Food Pledge Implement processes that follow the EPA Food Recovery Hierarchy
Sustainable Procurement	Sustainable procurement at UW-Madison is limited by: Insufficient required sustainability considerations in vendor evaluation and contract development Inconsistent reporting of third party certified sustainable products Limited auditing of vendor certified green attributes	UW-Madison specific sustainable purchasing standards including life cycle cost analyses during procurement and supply chain carbon footprint reporting requirements Support equity and diversity through minority and women owned business opportunities	 Implement cradle to cradle purchasing requirements Require vendors to provide "Green" / EPEAT / ethical sourcing certification reports Define and audit "green" product label in Shop@UW Complete Fair Trade Campus certification Require inclusion of minority- and women-owned businesses in all advertisements for bids

Table 6. Operations Focus Areas

Focus Area	Issue(s) to Address	Example Initiative(s)	Example Action items
Institutional Structures for Sustainability	UW-Madison lacks an upper leadership position focused on sustainability and will need structures and support to implement SAC recommendations	Institutional structures and/or staffing to advance the priorities defined by the SAC Continuity plan for SAC and the Student Subcommittee	 Develop resources to build leadership in sustainability for students, staff, and faculty Assess bi-divisional reporting and budgeting structure for Office of Sustainability Maintain student and shared governance participation throughout implementation Develop and maintain channels for feedback on implementation and/or reassessment of sustainability priorities Report regularly to campus community through passive (e.g., online dashboard) and active (e.g., presentation to shared governance) channels
Sustainability Integration	UW-Madison lacks the consistent inclusion of sustainability in upper leadership communications and strategic decision-making	Processes to ensure consideration of the priorities defined by the SAC in strategic decision-making	 Create educational opportunities and materials to build the sustainability capacity of leadership Define relationship of SAC priorities with the strategic framework Include sustainability domain experts in relevant decision-making
Sustainable Investments	UW Foundation and other university affiliated funds offer limited transparency on the makeup of investment portfolios and no policies that promote sustainable investment decisions	Greater transparency in investment portfolios Sustainable investment policies and sustainability-focused investment options for donors	 Create a committee on investor responsibility Create transparency by gathering detailed disclosures for the WFAA, WARF, and ETF investments Join industry trade group such as Task Force on Climate-related Financial Disclosures (https://www.fsb-tcfd.org/) Assess climate risk in investment portfolio Divest endowment funds from fossil fuels Create impact investing portfolios for donors
Green Revolving Fund	UW-Madison lacks a source of internal or gift funding to support investments in sustainable campus improvements	Large (>\$1M) revolving fund for university sustainable operational improvements	 Source seed funding and investment criteria Analyze current Green Fund projects for rate of return and ability to scale Create process for funding expansion of "campus as a living lab" projects Prioritize a Green Revolving Fund for future fund raising efforts

Focus Area	Issue(s) to Address	Example Initiative(s)	Example Action items
Systems-based Decision-making	UW-Madison lacks enterprise- wide systems that align sustainability-related policy, planning, and strategic decision making at all levels	Evaluation and implementation processes to ensure alignment of sustainability related policies, planning, and strategic decisions with enterprise-wide priorities	 Include triple-bottom line impact analysis in decision-making Incorporate internal carbon pricing in financial analysis Require sustainability measures and climate change adaptation in all departmental strategic plans Add sustainability tag to applicable campus systems (e.g., HR, grants, policy library, etc.) Incentivize innovative collaborative (between disciplines, departments, schools, etc.) strategic planning
Social Sustainability	UW-Madison cannot advance sustainability and resilience priorities without advancing social justice and equity	Processes to ensure that equity, inclusivity, and justice are core to all programs that advance sustainability and resilience	 Generate monetary support and develop administrative systems and/or training that cultivate diversity in hiring Remove historical campus markers of racism Create a coordinated infrastructure to respond to acts of structural oppression Support flexible work options including on-going work-from-home opportunities Fund land reparations and/or scholarships for Ho-Chunk and/or indigenous communities Continue to build support system for marginalized students Incorporate a Just Transition framework into climate action and adaptation planning (https://climatejusticealliance.org/just-transition/) Develop and set up resilience hubs across campus Consider and/or mitigate student affordability impacts of sustainability and/or resilience programs Integrate sustainability opportunities into UWell and other campus wellness efforts Work with campus units to strengthen and support ongoing communications channels with community stakeholders on sustainability programs (or develop channels where none currently exist)
Employee Engagement	UW-Madison does not leverage sustainability achievements and efforts to improve employee engagement	Programs to empower employees to engage with sustainability on campus	 Create honors and recognition for sustainability related team-building and/or community events Host campus-wide events for employees (e.g., Earth Day) Expand wellness coordinators and budget for events and programs, including outreach and engagement to teaching and graduate assistants

Table 7. Planning & Administration Focus Areas

2.b. Focus Area Review

All Focus Areas were reviewed and discussed by the SAC within their category groupings (Academics and Research; Engagement; Operations, Planning and Administration). Small group discussions were facilitated around the following questions:

- 1. What challenges could we face when advancing these Focus Areas?
- 2. What resources (e.g., expertise, partnerships, success stories, time) are available on campus and/or from your team(s) that could support advancing these Focus Areas?
- 3. What Focus Areas are missing?

Key takeaways from each discussion are included below.

2.b.1 Academics & Research Discussion Takeaways

- "If we want to recruit faculty in sustainability, as their core Focus Area, we need structures to support them"
- It is important to consider "departmental-wide pushes for including sustainability courses/learning outcomes in their field"
- Support for a suggestion to identify or develop sustainability courses within each major, ensuring all students are taught how sustainability relates to their field of study
- Support for the "concept of a sustainability institute to be a focal point of campus research and education"
- "I'm excited by the OPPORTUNITIES to advance sustainability efforts through this activity"
- "How can we more broadly learn as campus community members of the research and scholarship that is occurring in our own backyard at UW-Madison?"
- We need to "allow staff to set a block of time to pursue sustainability initiatives"

2.b.2 Engagement Discussion Takeaways

- "While we are still in uncertain times, sustainability sometimes feels like an add-on, we have the opportunity to incrementally build sustainability into the core of what we are, use it as a fundamental guiding principle"
- We "need to prioritize our audience/ initiatives, build some early wins that build traction and attract others"
- We need to increase "communication for student and sustainability opportunities"
- "Sustainability is a value that can cut across political beliefs, etc., it's a part of our lives and that should be the great unifier; it's something about which we have to listen, listen, listen, it's not going to be invented by us"
- "Paying attention to it and making it a part of our lives, this is a responsibility that we have that we need to survive"
- "I'm noticing opportunities and possibilities, it's always exciting to see all the ideas, opportunities to shift and change behaviors, culture shift, are we on culture shift overload? Can we afford not to be? Takes a long journey; associate sustainability with breathing"
- "Have we considered how we include sustainability language in the Wisconsin Experience and describe its different pillars?"
- The notion of sustainability being ingrained as a value for campus, understanding that our priorities as advocates for sustainability will change over time and we need to be open to that as an institution, it's also not just checking a box
- "Viewing how we incorporate our campus processes now, nothing is the same as it was 12 months ago, it's obvious we can pivot and rebuild systems and operations and policies"

2.b.3 Operations Discussion Takeaways

- There are lots of opportunities, these discussions were inspiring and encouraging
- Sustainable landscape and how we recognize our beautiful geography needs to be advanced on conjunction with paying respect to this Ho-Chunk land
- "When we redesign classroom spaces, keep sustainability forefront with an eye to equity and inclusivity"
- "Food is very important especially as we come back to campus; there are better choices that are better for the environment and for people"
- "I'm very excited about this conversation, specifically the discussion about issues on acting upon the words of a land acknowledgment and future issues with space utilization, I'm excited to see how we move forward with a hybrid model of campus operations"

2.b.4 Planning & Administration Discussion Takeaways

- "The informal process of strategic planning that comes from our voices and priorities is extremely important"
- "Sustainability seems to be following a similar path in that to truly express it as a value/ priority, it needs to become strategy and articulated as such, it cannot be a separate entity, but become a lens that we use when approaching decisions on campus so that we can truly integrate it in our work"
- "It's important that we rely on a combination of top-down and bottom-up approaches"
- "Sustainability is a core value of the institution and there needs to be clear and consistent expectation of what we mean by that, there's a need for key leadership focused on sustainability"
- "We need to redesign the narrative of sustainability, it's not just energy, it's creating inclusive environments and so much more"
- Social sustainability should be spread throughout our priorities, not a standalone item
- "This is a large initiative that requires resources, if we're serious about this we need serious resources"
- Great brainstorming about the possibilities for sustainability investments, perhaps having a student on the board and encouraging an endowment for sustainability
- "This focus on funding over human lives and mental health and happiness and prosperity was something I was thinking about a lot during this discussion"

2.c. Initial Prioritization of Focus Areas

Following each discussion, the SAC members completed an initial prioritization of the Focus Areas within each category. Tables 8-11 present the results of the initial prioritizations. These results were then presented to the campus community for feedback during the second round of listening sessions.

Academic & Research Focus Area	Average Rank
Sustainability Institute	2.55
Sustainability Research	2.73
Sustainability Courses	2.91
Sustainability Learning Requirement	4.00
Sustainability Faculty	4.00
Campus as a Living Lab	4.55
Honors & Recognition	5.82

Table 8. Academic & Research Focus Area Initial Prioritization; Note: a lower rank equates to a higher priority

Engagement Focus Area Average Rank

Sustainability Leadership and Advocacy	2.50
Sustainability Co-Curricular Learning	3.00
Sustainability Communications and Branding	3.90
Sustainable Events	4.00
Sustainable Athletics	4.80
Continuing Education	5.30
Sustainability Onboarding and Training	5.70
Alumni Engagement	6.00

Table 9. Engagement Focus Area Initial Prioritization; Note: a lower rank equates to a higher priority

Operations Focus Area	Average Rank
Sustainability Planning and Design	3.00
Green Electricity and Energy	3.10
Sustainable Buildings	3.30
Sustainable Landscape Management	3.30
Sustainable Food	4.70
Sustainable Transportation	5.00
Sustainable Procurement	6.00
Resource Management	6.30

Table 10. Operations Focus Area Initial Prioritization; Note: a lower rank equates to a higher priority

Planning & Administration Focus Area	Average Kank
Social Sustainability	2.78
Sustainability Integration	2.89
Institutional Structures for Sustainability	2.89
g . B 1B M1:	2.00

Institutional Structures for Sustainability 2.89
Systems-Based Decision-Making 3.89
Sustainable Investments 4.00
Green Revolving Fund 4.89
Employee Engagement 6.11

Table 11. Planning & Administration Focus Area Initial Prioritization; Note: a lower rank equates to a higher priority

2.d. Sustainability Leadership Framework and Recommendations

Before synthesizing the discussions and community feedback into a set of recommendations, the SAC reviewed the results of the 2010 Sustainability Initiative Task Force Report. The Task Force had an important impact on UW–Madison: it established the Office of Sustainability and defined its mission, which is to "align research and education on sustainability (our purpose) with campus operations (our practices) in the service of environmental, economic, and social responsibility to people and the planet." Additionally, in the 40 programs or projects recommended in the Report, there were other notable successes, including the establishment of OS communication channels (newsletter, website, etc.), the execution of sustainable transportation initiatives, and the development of a landscape master plan.

Nevertheless, the 2010 Sustainability Task Force Report included at least 25 recommended programs or projects that have seen little or no progress in the last decade, according to an informal OS analysis. While it is unlikely that a single issue inhibited the success of these recommendations, members of the SAC compared incomplete programs or projects from the Task Force Report that aligned with the newly prioritized Focus Areas in order to understand any lingering issues that may have inhibited past success.

 $^{^{18}\} https://dbmfwipzwwbdx.cloudfront.net/wp-content/uploads/sites/29/2017/03/sustainability_taskforce-report_10oct2010_web1.pdf$

Ultimately, the SAC determined that UW–Madison should reframe its conception of sustainability leadership. In the 2010 Task Force Report, sustainability leadership was defined as the intersection of education, research, and campus operations (Figure 2).

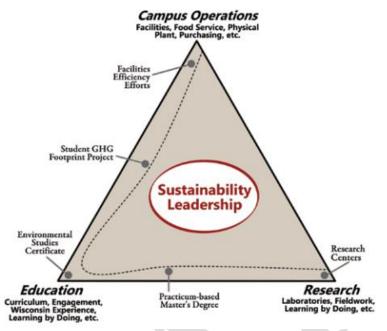


Figure 2. Sustainability Leadership Framework from 2010 Sustainability Task Force Report

The SAC identified a number of prioritized Focus Areas that didn't fall into one of these three categories, but instead were better reflected in the idea of the *culture* that is built at UW–Madison. The SAC thus proposed that sustainability leadership is embodied when our culture aligns with our purpose and our practice (Figure 3).



Figure 3. Framework for Sustainability Leadership

This framework provided a way to organize the Focus Areas that the SAC had identified as priorities for UW–Madison. By grouping the prioritized Focus Areas under the three institutional domains (culture,

purpose, and practice), the SAC developed vision statements for each institutional domain and a set of ten actionable recommendations, which are summarized in Table 12.

Our Culture Behavioral / Procedural Norms	Our Purpose Research and Education	Our Practice University Operations	
Make sustainability principles part of our day-to-day interactions, operations, and decision-making	Elevate sustainability as a discipline, support collaborative research, and expand learning opportunities	"Walk the talk" with policies, procedures, and systems that build a sustainable university	
Recommendations:			
Integrate sustainability into the culture of campus decision-making Center social sustainability in all programs to support diversity, equity, inclusion, and access Recognize UW-Madison as a leader in sustainability Table 13 Farmment Definitions and Recognize	 4. Establish a distinctive home for sustainability research, education, and operations 5. Champion sustainability research 6. Expand sustainability learning opportunities and collaborations 	 7. Plan and design for a sustainable and regenerative university 8. Pursue carbon neutrality 9. Achieve zero waste 10. Build and operate a sustainable campus 	

Table 12. Framework, Definitions, and Recommendations

In addition to encompassing a new sustainability strategy for UW–Madison, these recommendations also present an opportunity to advance UW–Madison's STARS score by focusing in on those credits with the biggest opportunities for improvement (see Appendix 5.e). Section 3 below includes details on how these recommendations will be realized and what the next steps are for the work of the SAC.

3. Next Steps

3.a. Review Process and Communications

The recommendations included in this report are in draft status until reviewed, revised, and approved by the Provost and Vice Chancellor for Finance and Administration. Upon finalization and approval, an updated report will be made available to the campus community and an online, interactive version of the final strategy will accessible through the Office of Sustainability Website.¹⁹

Communication and amplification of the strategy and transition to action will be coordinated with other campus-wide communications and are tentatively scheduled for Fall 2021.

3.b. Transition to Action

The urgency of advancing sustainability at UW–Madison has been expressed consistently by campus and community stakeholders. Therefore, the SAC proposed the creation of action groups that will be responsible for transitioning from strategy development to implementation of its recommendations.

Though immediately implementing all of the SAC's recommendations would have the greatest sustainability impact at UW–Madison, resource constraints, logistics, and sequencing considerations point toward a subset of action groups for initial roll-out. The SAC prioritized a total of seven action groups for kick-off in 2021 to build upon existing programs and resources or to focus on programs and projects that will enable future action groups. Table 13 includes details on the seven action groups and their selection rationale.

Action groups would be composed of subject matter experts, student representatives, and any other necessary implementation partners. Subject matter experts would include representatives from schools / colleges / divisions / departments that would contribute to implementing a program or project. One to two student representatives would bring the student perspective to action group work; students would be selected through an application process administered by the OS and Associated Students of Madison. Each action group would be chaired by a subject matter expert; staff from the OS would coordinate each action group, ensure consistent methodology, and build collaborations within and across groups. Suggested membership is included in the action plans included in the Appendix 5.f.

¹⁹ https://sustainability.wisc.edu/

Action Group	SAC Priority	Selection Rationale
Integrate Sustainability	Culture: Integrate sustainability into the culture of campus decision-making	Enables future programs or projects
Center Social Sustainability	Culture: Center Social Sustainability in all Programs to Support Diversity, Equity, Inclusion, and Access	Enables future programs or projects
Expand Sustainability Learning	Purpose: Expand sustainability learning opportunities and collaborations	Enables future programs or projects Builds upon existing programs
Champion	Purpose: Champion	Enables future programs or projects
Sustainability Research	Sustainability Research	Builds upon existing programs
Achieve Zero Waste	Practice: Achieve zero waste	Builds upon existing programs
Create Sustainable Facilities and Infrastructure	Practice: Plan and design for a sustainable and regenerative university; Practice: Build and operate a sustainable campus	Builds upon existing programs
Pursue Carbon Neutrality	Practice: Pursue carbon neutrality	Builds upon existing programs

Table 13. Action Groups

The action groups would have three key tasks as their first efforts:

- Summarize and Review the Current State
 - o Build from the work of the SAC and the STARS gap analysis (Appendix 5.d.)
 - Review and refine a high-level understanding of the current goals from existing strategic plans, important processes, and the results of applicable portions of the resilience assessment20
- Refine the Action Plans
 - o Define success metrics and tracking methodology²¹
 - Establish goals in the short, medium, and long term (ideally in the form of targets for the success metrics)²²
 - o Refine the programs and projects
 - o Execute programs and projects
- Report to the SAC
 - o Report on the progress of the action group at SAC meetings, identifying issues and support needed

Additionally, each action group (Table 14) includes programs and/or projects identified through the work of the SAC which could be initiated in parallel with the tasks outlined above. Details developed to support these tasks are included in the action plans in Appendix 5.f.

²⁰ As required by the Resilience Commitment and detailed here: https://secondnature.org/climate-action-guidance/completing-a-resilience-assessment/

²¹ With a focus on metrics from the STARS assessment and those suggested for tracking the Resilience Commitment detailed here: https://secondnature.org/wp-content/uploads/Indicators-of-Resilience-Final.pdf

²² Details on goal formation applicable to the Resilience Commitment are here: https://docs.google.com/document/d/16hELd-ZPk-RVScDRzbqfaJavbKohLczA9v-6AfFhOWI/edit

Action Group	Initial Program / Project(s)
	Deliver survey to students, faculty, and staff assessing UW-Madison's
Integrate Sustainability	sustainability culture
	Develop criteria and process for selection of, and organize celebration for,
	sustainability recognition and award recipients (individuals or teams)
Center Social	Implement processes to ensure that equity, inclusivity, and justice are core to all
	programs that advance sustainability and resilience
Sustainability	Align sustainability efforts with goals of Native Nations_UW and DDEEA
	Deliver survey to students, faculty, and staff assessing UW-Madison's
Ermand Creatainability	sustainability literacy
Expand Sustainability Learning	Develop guidelines and materials to support sustainable study abroad
Learning	Designate the Office of Sustainability as a departmental sponsor for student
	organizations
Champion	Establish criteria that define sustainability-related research
Sustainability Research	Develop best practices and resources for conducting research sustainably
Achieve Zero Waste	Complete and implement the (in-progress) zero waste plan for the main campus
Create Sustainable	Implement the (in-progress) Sustainable Facilities and Infrastructure program
Facilities and	Establish an institutional definition of local food and plan for increasing
Infrastructure procurement	
	Implement strategic energy management pilot
Pursue Carbon	Engage electric utilities for renewable energy programs/projects
Neutrality	Quantify and incorporate natural capital assets into campus GHG emissions
	inventory

Table 14. Action Groups and Initial Programs and Projects

3.c. Sustainability Advisory Council Year 2

In its second year, and assuming action groups are approved, the SAC will transition from defining strategy to advising on the implementation of action plans. Shifting to a quarterly meeting cadence, SAC meetings will focus on three primary goals:

- Status updates from relevant action groups;
- Recognition of sustainability champions; and,
- Identifying and proposing solutions to barriers.

The SAC will hold the OS and the campus community accountable in the pursuit of meeting their recommendations. The SAC will also address emergent issues and other strategic questions, which could include the organizational boundary for sustainability reporting, delays in action, and/or frequent action plan changes and modifications (which would further delay action). The SAC will also support the OS and the Wisconsin Alumni Association on development opportunities to support implementation.

The student subcommittee will continue as a supporting body and will be composed of student representatives from the action groups. The student subcommittee will meet to share lessons learned, best practices, and progress reports from the work of the action groups and important outcomes will be shared with the SAC.

Figure 4, below, illustrates the proposed relationship between the SAC, OS, and action groups. This is an illustrative structure that is not meant to indicate direct reporting or authority relationships, but rather to show how the different bodies will work in collaboration.

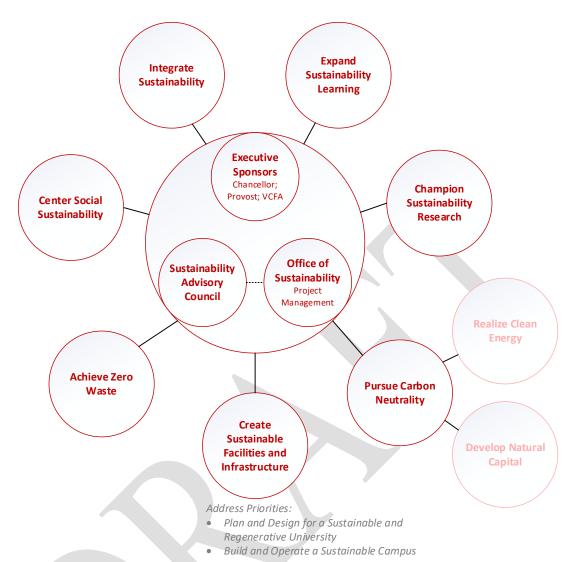


Figure 4. Organizational Structure for Implementation

4. Acknowledgements and Thanks

The success of the SAC was due to the diligence and hard work of a large team of individuals. Members of the Office of Sustainability, including Missy Nergard, Dr. Cathy Middlecamp, Dr. Andrea Hicks, Dr. Nathan Jandl, Josh Arnold, Alex Frank, Jake McCulloch, and Anjali Sridharan led the planning and execution of SAC meetings as well as preparation of supporting documents and resources. Graduate students at the OS, Tracy Harvey and Audrey Stanton, supported SAC meetings. Deb Gurke from the Office of Strategic Consulting provided expert advice and facilitation support throughout the planning and execution of the SAC efforts. Austin Lacey from Affinity Holdings helped designed the website which will display the final recommendations. Additional thanks to Eden Inoway-Ronnie for her guidance and insights.

Most importantly, all members of the SAC and student subcommittee generously donated their time to this effort. In the midst of a particularly challenging year the members logged on to yet another video call and were present in the discussions, making the SAC a priority amongst the many other priorities they are asked to juggle.



5. Appendix

5.a. Sustainability Advisory Council and Student Subcommittee Membership

5.a.1 Sustainability Advisory Council

Name **Division** Natalie Tinsen Associated Students of Madison Jacob Dolence **University Staff Congress** Nola Walker Academic Staff Assembly Giri Venkataramanan Faculty Senate Mo Bischof Academic Affairs Steve Ackerman Research and Graduate Education John Horn Finance and Administration Cheryl Gittens Diversity and Inclusion Mark Guthier **Student Affairs** At Large Student - Undergraduate Michael Williams Emma Heins At Large Student - Graduate Chris McIntosh Sarah Schutt Alumni Association

Table 14. SAC Membership

5.a.2 Student Subcommittee

Name	Major(s) / Program	
Katherine Ackley	International Studies and Environmental Studies	
Frank Adams	Real Estate, Management and Human Resources, and Environmental Studies	
Isaac Eskind	Environmental Studies and Finance	
Tyler Katzenberger	Political Science and Economics	
Loren Latts	Neurobiology	
Grace Martin	Environmental Science and Political Science	
Catie McDonald	Environmental Studies and Economics	
Marina Minic	Chemistry and Environmental Studies	
Cecilia Vanden Heuvel	Environmental Science and Botany	

Table 15. Student Subcommittee Membership

5.b. Student Subcommittee Report

The Sustainability Advisory Council Student Subcommittee

Executive Summary Reports

The Sustainability Advisory Council- Student Subcommittee writes on behalf of the group's priorities, campus academics, engagement, operations, and planning and administration.

Written by: Katherine Ackley, Frank Adams, Isaac Eskind, Emma Heins, Tyler Katzenberger, Loren Latts, Grace Martin, Catherine McDonald, Marina Minic, Natalie Tinsen, Cecilia Vanden Heuvel, and Michael Williams

Member

The Student Subcommittee is composed of 12 students at the University of Wisconsin-Madison.



Katherine Ackley is a senior studying International Studies and Environmental Studies. In addition to her studies and the SAC, she is an Office of Sustainability intern and an International Studies peer advisor. She is also involved in the campus' National Organization for Women, and Caroling Club. When she is not studying, she is probably knitting, cooking or taking care of my plants!



Frank Adams is a First-Year undergraduate student studying Real Estate, Entrepreneurship, and Environmental studies. He is currently working with campus group CLEAN to push for a university-wide commitment to clean energy. On the SAC Subcommittee, Frank is looking to advance issues such as sustainable real estate development, energy use, and food systems on campus.



Isaac Eskind is a senior at UW-Madison. He is majoring in environmental studies and finance. Isaac is a part of WSCAC and in the UW-Divestment Coalition. Isaac hopes to advocate for an increase in many areas on campus, such as electric busses and a more comprehensive recycling infrastructure.



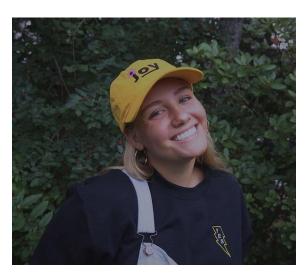
Emma Heins is a graduate student in the La Follette School of Public Affairs, where she is studying environmental policy with a focus in public health outcomes in low income communities. She is also earning a certificate in energy analysis and policy with the Nelson Institute for the Environment. She is a graduate of the University of Tennessee-Knoxville, where she earned her Bachelor's of Science in Environmental Studies and Geology.



Tyler Katzenberger is a first-year undergraduate student majoring in Political Science and Economics with certificates in Environmental Studies and Public Policy. As a student representative on the Sustainability Advisory Council Subcommittee, he hopes to promote sustainable and equitable development on campus. Additionally, he is adamant about preserving the natural resources and landscapes on campus, even as the university continues to engage in new infrastructure projects.



Loren Latts is a junior majoring in Neurobiology with certificates in Global Health and Business Fundamentals. After graduation, she plans on pursuing a master's in health administration. She is an undergraduate student on the Student Subcommittee where she focuses on bringing a scientific perspective to discussions. She hopes to achieve sustainability through a mobilization of scientific evidence about climate change that becomes a part of the foundation for informing UW-Madison's environmental choices.



Grace Martin is a junior studying Political Science and Environmental Science. She is the Social Media Director for the ASM Sustainability Committee and the Vice President of the Sierra Student Coalition. She is also actively involved in the Wisconsin Student Climate Action Coalition and uses her position to advocate for environmental justice.



Catie McDonald is a double major in Environmental Studies and Economics with certificates in sustainability and business. She currently is in her second year as an intern at the UW-Madison Office of Sustainability. After graduation she plans to pursue a Master of Science in Environmental Science with policy and planning focuses. As an undergraduate member of the Student Subcommittee she aims to increase social sustainability efforts on campus in more concrete and long-lasting ways.



Marina Minic is a senior studying Chemistry and Environmental Studies with a certificate in East Central European Languages, Literatures, and Cultures. She is currently an intern for the Office of Sustainability and is an executive board member of Campus Leaders for Energy Action Now (CLEAN). Marina hopes to encourage bold climate action goals for the university in order to address inequities on campus and across the state.



Natalie Tinsen is a junior studying Economics and Environmental Studies with certificates in Sustainability, Global Health, and Business Fundamentals. She is the Chair of the ASM Sustainability Committee, and Office of Sustainability Intern, and is the student representative for the Midwest Climate Summit. She hopes to continue to raise awareness for these efforts through the Sustainability Advisory Council by improving environmental literacy and sustainable action.



Cecilia Vanden Heuvel is currently a sophomore double majoring in Environmental Science and Botany. Following the completion of this degree, she plans to pursue a master's in Plant Ecology. She is currently a part of the ASM Sustainability Committee to advance off campus recycling efforts, and is also a member of the Sierra Student Coalition. As a part of the Sustainability Advisory Council Subcommittee, Cecilia hopes to promote ideas leading towards protection of natural resources to further our campus and surrounding



After graduating high school and Information Technology Academy, Michael Williams traveled from the Oneida Reservation to UW–Madison, where he currently studies. Michael is a Psychology major on a Pre-Law track. He works within Native communities to better tribes in education, science, and mental health. While he is interested in law, he still devotes a lot of his time to photography, graphic design, and video editing.

Executive Summaries

Throughout the year, the student subcommittee met once a month in order to discuss the upcoming SAC meetings as well as debrief on the previous meeting. These briefs are written to highlight the student perspective throughout the Sustainability Advisory Council and how students view sustainability at the University of Wisconsin-Madison. These summaries are written by members of the student subcommittee and highlight the areas of: subcommittee priorities, academics, engagement, campus operations, and campus planning and administration.

Prioritization

Written by: Frank Adams, Emma Heins, and Cecilia Vanden Heuvel

Looking at the four focus areas: Academics, Engagement, Operations, and Planning and Administration the SAC subcommittee has prioritized specific actions that they would like to see implemented in the future of advancing sustainability on campus. These actions consist of ideals that they find important when looking at all of the focus areas, rather than just specific points from each one. The top three priorities when reviewing the upcoming focus areas given by the SAC subcommittee are as follows, reflecting the Wisconsin Idea, incorporating social sustainability, and following through with tasks that are not always easily completed. This was a preliminary discussion of the different ways sustainability can be assessed and measured at UW-Madison and how the student group valued each area. Much of it was high level and not tied in specifically to initiatives, but rather overarching goals that the students want

The top three initiatives discussed in this meeting were incorporating the Wisconsin Idea, social sustainability into all aspects of the recommendations, and not defaulting initiatives that are easily completed. The SAC subcommittee recommends that when implementing sustainability initiatives in the future, that the university prioritizes the incorporation of social sustainability. Social sustainability can be further divided into four dimensions that include equity and diversity, quality of life, social cohesion, and democracy and governance. Equity and diversity ensures that there is a reduction in disadvantages of specific groups, as well as covering human rights of minority groups. Quality of life refers to accessibility to employment, affordable housing, food, and safety. Social cohesion creates increasing participation between all groups. Democracy and governance provides adequate budget and resources to follow through. These dimensions include protection of areas focused on equal education, human rights, and equity for all genders, all races, and indigenous groups. The SAC subcommittee is asking for a prioritization of social sustainability into future sustainability initiatives to ensure that the dimensions above are followed through. Looking specifically at the dimension of social cohesion, the subcommittee believes that this dimension will increase advocacy and care for the

environment due to increased student participation in sustainability. This is supported by the subcommittee because it will increase awareness that is often needed to garner support for initiatives led by student groups on campus. Social sustainability is essential when following through with sustainability initiatives per the prioritization by the SAC subcommittee.

Secondly, the SAC Subcommittee advises that the university prioritizes initiatives that reflect the Wisconsin Idea. The Wisconsin Idea is our guiding principle that recognizes our duty as a university to improve the health and lives of all its stakeholders, especially Wisconsin communities. With that as our guiding principle, it only makes sense that the SAC recommends, and that the university implements the sustainability initiatives through which we are able to most effectively improve the quality of life for those who we are to serve. It's important to commit to sustainability initiatives that truly reflect the Wisconsin Idea because we, as a large flagship university, have the privilege to make decisions that affect the lives of so many. We must use that privilege with care by ensuring that our decisions are in the best interest of our stakeholders. Sustainability is at the heart of the Wisconsin Idea. Without a healthy environment, the health of Wisconsin citizens becomes vulnerable. Adopting sustainable practices is especially important for those in charge of these decisions in order for the Wisconsin Idea to remain as our guiding principle.

The third initiative that the student group discussed was tackling the difficult and complex tasks that accompany sustainability. It would be easy for the university to tackle the "low hanging fruit" in terms of efficiency and recycling, but they would be missing the bigger picture of sustainability and not truly addressing the fundamental aspects of the school, and their inefficiencies. Students value this as a priority because there is value in a university that aims for true physical and social sustainability. Updating conditions like campus infrastructure, operations, expanding sustainability classes offered require an exceeding amount of time and planning but, by making those meaningful changes for the campus community that significantly contribute to campus sustainability, will make a lasting impact on all for decades to come.

For our sustainability efforts to be successful, it is important that we focus on bringing about initiatives that increase student involvement, reflect the Wisconsin Idea, and are high impact, even when that means high difficulty. Initiatives that can garner the strongest student engagement and have an "all hands on board" will not only increase effectiveness and scale of impact, but will also work to increase awareness around values of sustainability. The more students we can get to engage in our sustainable initiatives, the more citizens of the environment there will be. The more exposed to sustainability our students are, the more their behaviors and values will reflect care for the environment. By prioritizing initiatives that reflect the Wisconsin Idea, we are upholding our commitment to the health and life of our Wisconsin communities and beyond. UW-Madison must maintain this commitment because of the power and privilege that the college holds. And by prioritizing initiatives that are highly impactful in terms of sustainability, we are not backing down from the immense challenge that faces us; a challenge which we have a hand in creating: climate change and depletion of natural resources. There is no time to waste. As expressed in our kickoff meeting, this is work that should have been done

yesterday. Because we are behind the curve, our initiatives must be highly impactful, no matter how difficult they may be. It's too late to take baby steps. Large action must be taken. For all this, the SAC Student Subcommittee advances the position that the best sustainability initiatives for the university to undertake will be those that gather the most student engagement, honor the Wisconsin Idea, and are of the highest impact.

Academics

Written by: Katherine Ackley, Tyler Katzenberger, and Catie Mcdonald

Academics is the main focus of any university, and being a leader in educational programs is something that UW-Madison prides itself on. The university is uniquely situated to expand sustainable academic programs, as we have a plethora of resources here on campus to work with. In addition, Wisconsin has a long standing environmental legacy due to many great environmentalists and sustainability activists from the state, one of which is Gaylord Nelson, whom our Nelson Institute of Environmental Studies is named for. UW-Madison already is primed to be a leader in sustainability academics; now is the time to make it happen. The suggestions highlighted below are what the SAC Student Subcommittee believes will advance the university's position in sustainable academic programs and create a hub for sustainability innovation and research.

Sustainability Institute

A central hub for sustainability on campus would be beneficial to all, as it gives all students and departments easy access to sustainability-related resources, research, classes, and organizations. There are many major and certificate programs across campus which embody the multiple facets of sustainability; examples can be found <a href="https://examples.org/nc/

Sustainability Coursework

As it stands now, UW-Madison is lacking in both quantity and visibility with regards to sustainability coursework. Nowhere is this clearer than in the STARS report; gap analysis in the academics area of the report shows that UW-Madison is the third-lowest of the over 20

universities in its STARS peer group for academics and ranks especially terrible in the academic coursework credit area. To improve their STARS score, the university must start by offering more courses. Accomplishing this goal requires incentives for professors willing to teach sustainability courses as well as implementing a Sustainability Institute; however, all of that work will be left on the sidelines if UW-Madison does not integrate sustainability coursework into majors beyond the Nelson Institute. To increase visibility of sustainable coursework, the university must, at a minimum, offer a "SustainabilityEDU" online onboarding course for incoming freshmen to introduce them to sustainable culture on campus. This will likely have little effect, though, as many students skip through the existing onboarding courses. Therefore, the university ought to go a step further and introduce a new sustainability general education course requirement in order to make sure every student who graduates the university has learned about sustainable practices and sustainability issues for at least a semester. There is precedent for implementing new general education requirements; within the past five years, the university implemented an "Ethnic Studies" requirement for all students to address the growing need for diverse perspectives and histories to be integrated in every student's education. Now, it is time that UW-Madison does the same for sustainability to recognize the importance of balancing economic growth, social equity, and environmental protection in every field of study.

Sustainability Research

UW-Madison needs to incentivize, organize, centralize and implement sustainability research on campus. As of right now, there is little incentive for professors to conduct sustainability-related research and no central location for students to find such research. We need a system to make sustainability-related research easily accessible, such as a sustainability checkbox on WISER. This will increase student learning by allowing students to more easily access the research, connect with professors, and participate in research as research assistants. However, arguably more important to students than increasing the amount of and accessibility of sustainability-related research on campus is the implementation of the research to improve campus sustainability. UW-Madison is already home to incredibly talented professors conducting important, groundbreaking research. But the value of research is lost if it isn't used to make change. UW-Madison should take advantage of the sustainability research already being conducted by professors on campus, as well as research which will be pursued in the future, to make campus more sustainable. UW is already a leading research institution, it's time to also be a leading institution in sustainability-related research.

Initiative	Description	Tangible Outcome	Student Benefits	Drawbacks
Sustainability Institute	A hub for sustainability	Place for classes, research, orgs for sustainability	Centralized hub for students to get involved with	Costly, take years to build, etc.

			sustainability	
Sustainability Coursework	UW-Madison is far behind its peers in STARS goal AC-1 (Academic Coursework). To fix this, the university must facilitate the creation and promotion of sustainability courses.	- Incentives for instructors willing to create sustainability courses Creation of "SustainabilityED U" onboarding course - Addition of a sixth general education requirement for sustainability.	- Increased exposure to sustainable practices in all fields Shared campus knowledge on sustainable practices More opportunities for sustainable education.	- Incentivizing new courses would be a moderate expense Implementing new sustainability education requirements, no matter its importance, will get caught in bureaucratic red tape.
Sustainability Research	UW-Madison lacks a system to track sustainability-related research, incentives to encourage sustainability-related research and a centralized location to find sustainability-related research. It also lacks a system to implement the research to improve campus sustainability.	-Incentives for staff to conduct sustainability-rela ted research such as in promotion, tenure, or professorships -a system to track said research, such as a sustainability checkbox in WISER -centralized location to find sustainability research -system or committee to implement research into policy on campus	Students will be able to easily access and participate in an increased amount of sustainability-related research. The university will also be more sustainable with the implemented research.	Costly to fund research and to implement the research to make the campus more sustainable.

Engagement

Written by: Issac Eskind, Grace Martin, and Cecilia Vanden Heuvel

Sustainability engagement should be held as a top priority from the University of Wisconsin-Madison because unfortunately, it is something the university continues to grapple with. The SAC Subcommittee focused on two different categories - what the university is strong in versus what can be improved. Events, advocacy, job and research opportunities, coursework, and communication were all areas which were touched upon during the large and small group discussions. The idea of a Sustainability Hub on campus was also discussed, as this may be advantageous in improving many of the categories discussed.

With the discussion of possible areas for improvement, the SAC Subcommittee prioritized the top three initiatives which they thought would be useful to improve sustainability engagement at UW-Madison.

Initiative	Description	Tangible Outcome	Student Benefits	Drawbacks
Sustainability Leadership and Advocacy	Create UW Madison as a nationally recognized university that leads in sustainability efforts. Lead in efforts to use renewable energy. Collaborate with the Big Ten system in regards to sustainability, and advocate for sustainable public policy.	UW Madison will become nationally recognized in sustainability which will garner national recognition. Lead in sustainability. Join climate pacts and advocate for related government policy.	Increase in student numbers due to advocacy as a sustainable campus. Students are morally comforted by going to a school that largely practices sustainability. Moral and physical benefits for students.	Costly for the university.
Continuing Education	Since sustainability is a systemic issue, there are endless perspectives that can have a sustainability piece. Each field of study should	This will ensure that all students will have some background of sustainability in their field.	Students will graduate with an understanding of how sustainability relates to their field, what they can do to promote	This will likely cost the university money because they are offering more classes and might have to pay teachers more or hire new

	have at least one or two sustainability courses		sustainability, and a generic understanding of the most important issue of our time.	teachers to teach these courses.
Sustainable Athletics	Have all university athletic teams and athletic events take sustainable action, whether that be with uniforms, transportation, game day activities, etc. Some athletic events are large waste days, so targeting for zero waste at all events etc.	The most tangible outcome will be a reduction in waste or GHG emissions. However, it will also gain large media attention and push other universities to follow suit. Athletics events garner a large public audience, if game days were promoted as sustainable this would target a large amount of people.	Students athletes will be more informed about the carbon footprint of athletics. Students will become aware or more aware of sustainability during athletic events. Students could also help find solutions for our targets.	This could have some high up front costs for the University.

When asked about these issues, students of the Sustainability Advisory Council subcommittee were quoted on the following. It was evident that the subcommittee wholly agrees that UW Madison must largely increase their sustainability efforts not only for the good of the planet, but to become a leading university on environmental issues. A subcommittee member was quoted saying, "I am disheartened by UW Madison's sustainable efforts, I believe they should be doing more. Climate change is a very pertinent issue that should be at the forefront of our University's leadership and decision making." The subcommittee additionally came to the conclusion that sustainability requirements should be incorporated into every major with classes that tie together the major and sustainability. The following quotes are taken from the subcommittee members: "Because sustainability relates to every field, it is important for all students to learn about it from their major's perspective" and "Since this is the biggest challenge of our lifetimes, each student must have some understanding of sustainability issues." The subcommittee found Sustainable athletics to be important to prioritize due it's it's large impacts. These are the quotes taken from the subcommittee, "because athletics are such a big part of external relations with alumni, other universities, and the public at large, sustainable athletics

would create a large amount of change for the university both directly and indirectly" and "athletic events reach a large public audience. Creating a sustainable game day would link sustainability to our university for students, the public, and alumni.

These initiatives are important for the student experience at UW-Madison for a multitude of reasons. First, these measures will help promote the importance of sustainability, benefiting the university and its image and our student body. For example, co-curricular learning will push all students to learn about this issue. This will continue to be important in the future as well, as the effects of climate continue to change our world. Additionally, it will help UW-Madison continue our commitment to our future. By taking a lead in making changes to our campus, we can continue to be leaders in the state, the BIG10 and all around the country. And lastly, these initiatives are important because they will improve our campus and create stronger leaders in our university. The specific prioritization of these initiatives would assist in the ideals agreed to be focused on by the subcommittee: reflecting the Wisconsin Idea, incorporating social sustainability, and following through with tasks that are not always easily completed. These initiatives would reflect the Wisconsin Idea by improving the livelihood of students and the Wisconsin public through increased sustainability measures. Social sustainability would be added throughout each of the initiatives, and would be a priority. These initiatives are also asking for larger tasks to be followed through. As a subcommittee, we acknowledge this, but if these initiatives continue completed, there will be drastic, positive impacts for the university, its students, and all of Wisconsin. Finally, we ask that the University uses our recommendations of prioritizing Sustainability Leadership and Advocacy, Continuing Education, and Sustainable Athletics in the Engagement focus area.

Operations

Written by: Frank Adams, Loren Latts, and Marina Minic

Operations is a fundamental aspect of campus sustainability at the University of Wisconsin-Madison. According to the <u>AASHE STARS report</u>, Operations include Air & Climate, Buildings, Energy, Food & Dining, Grounds, Purchasing, Transportation, Waste, Water. This category contains many different campus operations that are essential to consider when working in sustainability, and impacts all three pillars of sustainability (social, environmental, economic). They are also very interconnected, so creating change in one subcategory is sure to garner change in another. UW-Madison received a silver on the STARS report, and received scores in the operations focus topic that are noticeably lower than scores in other focus topics. These low scores emphasize the importance of making bold change in the way our campus operates. Food waste, fossil fuel usage, and inefficient buildings are all large carbon emitters. By focusing on waste standardization, energy procurement, and building design, the UW-Madison campus will see large improvements in sustainability, and large decreases in carbon emissions.

Resource management

Resource management was uniformly decided by the SAC subcommittee to be of the utmost importance in the operations focus area. One noticeably large on-campus disparity is access to dependable composting and recycling networks. The system for waste management is not uniform throughout campus; specifically, in the dorms and dining halls. As stated by Natalie Tinsen, the chair of the subcommittee, "All students should have access to the best resources; we need to standardize our operations," in order to ensure equality within accessibility. Therefore, the initiative the SAC Subcommittee would like to prioritize from the operations focus area is waste standardization. According to the STARS report, the university scored a 3.58/8.00 on Waste Minimization and Diversion, with an overall score of 5.17/10.00 for the Waste category. Evidently, there is room for improvement. Waste standardization provides a foundation to achieve a zero waste plan for campus. Feasible actions that could be taken by the university to work towards the zero waste goal, are consistent signage (about various waste disposal methods) and the same number of prime-quality recycling and compost bins in each dorm and dining hall. The tangible outcomes of these actions would be increased use of recycling and compost bins, reduced amount of waste sent to landfills, and lower garbage-related costs for the school, which would allow for more sustainable opportunities the university could pursue.

Not only will direct campus community members benefit from this initiative, but so would surrounding communities and the broader environment. Effective recycling and composting systems reduce fossil fuel usage, energy use, and greenhouse gas emissions. However, it's imperative to note that there are possible drawbacks to this initiative, such as sunk costs. A waste audit would need to be conducted, sustainable suppliers would need to be recruited, and cost-effective strategies would need to be put in place: which can be expensive for the university. Additionally, another risk associated would be whether waste standardization would be effective in terms of campus members knowing what can and cannot be recycled and composted. Although there are obstacles in order to achieve waste standardization at UW-Madison, with a proper waste standardization process put in place, the benefits would outweigh the possible hurdles, which is why the SAC subcommittee fully believes that waste standardization should be of the utmost priority in order to expand sustainability for all.

Green Energy and Electricity

Green energy and electricity had unanimous support among the SAC student subcommittee, and often has consistent support among other student organizations as well. Investing in green energy and electricity would result in a high-impact action on campus, and directly improve the lives of those in surrounding communities, which would allow UW-Madison to keep its commitment to the Wisconsin Idea. The initiative the Student Subcommittee would like to prioritize from the Green Energy and Electricity focus area is to procure 100% renewable electricity and source net zero carbon energy. The university received a score of 0.06/4 in the *Clean and Renewable Energy* category, and a 3.40/6 for the *Building Energy Consumption* category. Although both scores are low, it is clear that investment into renewable energy infrastructure both on and off campus is the necessary next step. The MGE

Rider program is attractive for the university because it goes beyond buying renewable energy credits from some far-off solar farm located five states over. Through the Rider program, the University can invest in new renewable energy programs located in surrounding communities. This can directly contribute to encouraging MGE to continue shutting down their coal plants, which in turn benefits our fellow Wisconsin residents. The program also has a tangible outcome, as it would improve UW-Madison's renewable energy portfolio, and bring it closer to 100% renewable energy. Prioritizing the goal of 100% renewable energy would be a benefit to students in many ways. This is something that generations of students have been advocating for, and the accomplishment of this goal would result in immense pride for both current and former students. Implementing infrastructure on campus would also create the opportunity for hands-on learning for students, and would contribute to the idea of making campus a living lab. Renewable energy is a high-cost and high-impact initiative that would put UW-Madison back on the map of academic institutions leading in environmentalism. The upfront cost is large, but the money saved in the long run is even larger¹. For environmental, social, and economic reasons, prioritizing a goal of rapidly transitioning to 100% renewable electricity and net zero carbon energy is imperative.

Sustainable Planning and Design

Sustainable Campus Planning and Building Design is another focus area within Operations that the SAC Subcommittee holds as high priority. Sustainable Campus Planning and Building Design means designing indoor and outdoor spaces, buildings, and incorporating energy systems within those places (i.e lighting, heating & cooling) with sustainability as a priority. The SAC Subcommittee holds that incorporating a high level of sustainability within campus planning and building design is an essential task in the goal of becoming an environmentally conscious university. Knowing that buildings and building construction account for 38% of global greenhouse gas emissions (Global Alliance for Buildings and Construction), increasing sustainable efforts in our Planning and Design processes can be the most impactful strategy in becoming a sustainable campus. The University has made great strides in fighting Climate Change by installing solar panels on the roof of Gordon Dining and Event Center and committing to the purchase of half of the energy produced by Madison Gas and Electric's planned solar generation facility to be built in Fitchburg, Wi.

Despite these and other similar initiatives that bring much-needed clean energy into our buildings' operations, the SAC has stated that "UW-Madison does not have a consistent methodology for incorporating sustainability into campus planning and building design" (SAC, 2021). Additionally, the university lacks "comprehensive requirements for incorporating sustainability practices and principles into building operations". This hinders our ability to

¹ Bolinger, M., & Seel, J. (2019, December 18). *Berkeley Lab's "Utility-Scale Solar" report sees continued growth and falling costs for big solar*. Berkeley Lab's "Utility-Scale Solar" report sees continued growth and falling costs for big solar | Electricity Markets and Policy Group. https://emp.lbl.gov/news/berkeley-lab-s-utility-scale-solar-report.

ensure that future designs are environmentally focused. To remedy this, the SAC Subcommittee encourages the university to develop formal sustainability requirements for all future building projects and that infrastructure should be prioritized. Green energy systems and materials, air quality, and water efficiency are among other criteria that should be required. The university should also work towards improving the aforementioned aspects of our current buildings, in order to meet a high standard of sustainability. Besides limiting the amount of pollution produced by buildings, sustainable design will allow for our spaces of learning and collaborating to remain clean and keep our student body healthy.

Graphical Analysis

Initiative	Description	Tangible Outcome	Student Benefits	Drawbacks
Resource Management	Access to dependable composting and recycling networks on campus.	Waste standardization provides a foundation to achieve a zero waste plan for campus: consistent signage, and the same number of prime-quality recycling and compost bins in each dorm and dining hall.	Effective recycling and composting systems reduce fossil fuel usage, energy use, and greenhouse gas emissions.	Waste audits would need to be conducted, sustainable suppliers would need to be recruited, and cost-effective strategies would need to be put in place and campus members knowing what can and cannot be recycled and composted.
Green Electricity and Energy	Green energy is that which comes from natural sources, such as the sun. renewable energy comes from sources that are	Procure 100% renewable electricity and source net zero carbon energy.	Investing in green energy and electricity would result in a high-impact action on campus, and directly improve the	The upfront cost is large, but the money saved in the long run is even larger ²

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² Bolinger, M., & Seel, J. (2019, December 18). *Berkeley Lab's "Utility-Scale Solar" report sees continued growth and falling costs for big solar*. Berkeley Lab's "Utility-Scale Solar" report sees continued growth and falling costs for big solar | Electricity Markets and Policy Group. https://emp.lbl.gov/news/berkeley-lab-s-utility-scale-solar-report.

	constantly being replenished, such as hydropower, wind power or solar energy.		lives of those in surrounding communities, which would allow UW-Madison to keep its commitment to the Wisconsin Idea.	
Sustainable Planning and Design	Designing indoor and outdoor spaces, buildings, and incorporating energy systems within those places (i.e lighting, heating & cooling) with sustainability as a priority.	Develop formal sustainability requirements for all future building projects, green energy systems and materials, air quality, and water efficiency are among other criteria that should be required.	Sustainable design will allow for our spaces of learning and collaborating to remain clean and keep our student body healthy.	"Comprehensive requirements for incorporating sustainability practices and principles into building operations". This hinders our ability to ensure that future designs are environmentally focused.

The three focus areas discussed above—Resource Management, Green Energy and Electricity, and Sustainable Campus Planning and Building design— and their respective initiatives are all essential areas of prioritization when it comes to furthering sustainability on campus operations. Waste management efforts such as providing easily accessible recycling and compost bins to all dorms and dining halls and increasing awareness regarding signage about waste management can have a huge impact on student waste behavior, and will stride towards creating a much more environmentally conscious student body. Investing in local clean energy will decrease our ecological footprint, a concern consistently raised by our student body. Additionally, our divestment from coal-powered energy will encourage companies such as Madison Gas and Electric to reduce coal operations, which would greatly benefit many Wisconsin communities suffering from coal pollution—an impact that would support our university's guiding principle, the Wisconsin Idea. Finally, putting in place formal sustainability requirements for all campus planning projects and buildings will help ensure that our students' learning environments are clean and healthy. It will also curb the negative impact that the number one carbon polluter on campus—buildings—has on the environment. Ultimately, it is in the best interest of the environment, UW-Madison, the Wisconsin community and beyond that the administration in charge of operations focuses on improving sustainability efforts in resource management, green energy, and campus planning and building design.

Campus Planning and Administration

Written by: Loren Latts, Tyler Katzenberger, and Catie McDonald

Planning and Administration at the university is highly involved in how UW-Madison will progress in terms of sustainability as this area creates most of the opportunities for sustainable growth on campus. It also lends a hand in forming campus culture and what UW-Madison is known for. Therefore, Planning and Administration decisions and policies – from funding and investment decisions to social support and campus culture – play a major role in the university's advancement of sustainable practices. The Wisconsin Idea already leads to innovative sustainability efforts on campus, but Planning and Administration can focus on the suggested initiatives below to fully put these efforts into action and expand integration of sustainable practices at all levels of the university.

Sustainable Investments

The UW Foundation claims on its website to have an endowment over \$3.3 billion and that the investment team, "endeavors to achieve the best possible long-term returns with the least amount of risk." As of 2018, the Foundation had ~3.8% of its endowment, or \$124,785,961, invested in fossil fuels. "The Wisconsin Foundation & Alumni Association portfolio must be transparent; we want to put our money where our mouth is and have very clear divestment targets" (SAC Subcommittee, 2021) The fossil fuel industry has become a very risky investment as of late, as over fifty coal companies have declared bankruptcy since 2012, and natural gas and oil markets are quite volatile and elastic, or sensitive to price changes.

It has been found that divestment from fossil fuels and reinvestment in renewables can actually increase the risk-adjusted performance of an investment, meaning higher returns. Reinvestment into renewable resources, such as wind, solar, or hydro, would make UW-Madison a leader in sustainability, as well as alleviate the environmental burdens BIPOC communities have endured. Reinvestment, however, should not be solely directed toward renewable energy markets. Investment decisions should be made to support the students and the Madison community by providing equitable resources for socioeconomic growth and to employ practices of justice and revitalization. Examples of this include investing in smaller, diverse, local industries, as well as public sector infrastructure, both of which help to create people-centered sustainable communities. Reinvestment also can be directed toward places that prioritize the rights and wellbeing of the community by addressing social inequities based on race, class, gender, immigrant status, and other forms of oppression. "There's always been reasons not to divest, arguments that there aren't the resources or funding to do so... but funding has been used an argument for many different things, such as why slavery should not be abolished."(SAC Subcommittee, 2021) Fossil fuel divestment and sustainable reinvestment would not only address climate change, but also the socioeconomic issues that have resulted due to climate change.

Social Sustainability

Within Planning and Administration, social sustainability had unanimous support among the SAC Student Subcommittee as a focus area. Generally, sustainability is only thought of in terms of how to cultivate a viable environment: however, this only scratches the surface of its definition. We need to redesign the narrative of sustainability, it is not just cleaner energy, but it also includes creating inclusive spaces. Failure to acknowledge the intersectionality between sustainability and social factors such as race, wealth, education, etc. is a blatant mistake. Therefore, the initiative the Student Subcommittee would like to prioritize from the Social Sustainability focus area is that there needs to be processes put in place to ensure equity, inclusivity, and justice are core to all programs that advance sustainability and resilience. In other words, social sustainability should not be a separate entity, but interwoven into every recommended initiative, and as Michael Williams, a member of the SAC Student Subcommittee said, "Social Sustainability should be the tenet in all decision making."

According to the AASHE STARS report, the university scored a 1.92/3.00 on Support for *Underrepresented Groups* and a 1.33/2.00 for *Diversity and Equity Coordination*. Evidently, there is needed improvement. Feasible actions that could be taken by the university to ensure equity, inclusivity, and justice are core to all sustainability programs are prioritizing identity-based student organizations, funding land reparations for Ho-Chunk and other indigenous communities, and incorporating a Just Transition framework into climate action. Social sustainability efforts are incomplete without tangible goals for the inclusion of BIPOC voices and land recognition for the Ho-Chunk Nation (SAC subcommittee, 2021). Tangible outcomes of these actions include creating inclusive environments, working towards environmental justice, and ensuring students from identity-based student organizations and/or backgrounds are heard. These outcomes would have many student benefits such as increasing students' involvement with sustainability, reducing inequalities, and fostering equitable social development. It is also important to recognize that there may be challenges in order to achieve this goal, such as leaders' unwillingness to listen or care enough about social sustainability to make it a priority in all university decisions. As Emma Heins, one of the members of the SAC Student Subcommittee states, "[...] there's a need for key leadership focused on sustainability." As presented, it is imperative to prioritize social sustainability because UW-Madison cannot advance sustainability and resilience priorities without advancing social justice and equity.

Sustainability Integration

"Sustainability should not only be kept at the forefront of decision-making, but implications after the fact ought to be considered as well." (SAC Subcommittee, 2021) Before we can begin to integrate sustainability throughout campus, we have to recognize that sustainability is a UW-Madison core value. Sustainability must be understood in the same context as academic excellence, innovative research, and the Wisconsin Idea - in other words, as an integral part of who we are as a university. It then follows that the recommendations of groups promoting

sustainability, such as the SAC, must be recognized as legitimate concerns for the university to address. Voices matter, and to ensure sustainability advocates' voices are heard, there must be an institutional framework for sustainable advancement that allows SAC reports to travel quickly and directly to the highest level of administrative staff. Existing administrators must also be working towards sustainability goals; however, they need to go beyond top-down, overarching edicts. To effectively change campus culture and processes, administration needs to enact policies and create educational opportunities which attack specific issues and grow a student body capable of innovative sustainability solutions.

Campus administrators must also horizontally integrate sustainability into all facets of campus planning. The best way to ensure sustainable interests are heard is by including sustainability experts in all aspects of decision-making on campus. Whenever a decision is made, whether it be a change in the campus supply chain, development of a new public space, planning for an event, or development of new employee onboarding procedures, administration must ensure that sustainability experts are recognized as a stakeholder and offered a seat at the decision-making table. Furthermore, sustainability needs to be prioritized in departmental budgets. While the Green Revolving Fund offers capital for innovative projects, its current status as a primary funding beyond for sustainable projects, is limiting opportunities for innovation and project funding within departments. "The Green Revolving Fund reduces initiative for departments to incorporate sustainability in their budgets and building" (SAC Subcommittee, 2021) To decrease reliance on the Green Revolving Fund, administration must mandate budgeting within departments for sustainable solutions. Finally, the best thing our campus leaders can do to foster sustainability is to think of sustainability as more than just energy, but as a part of our campus identity.

Initiative	Description	Tangible Outcome	Student Benefits	Drawbacks
Sustainable Investments	The removal of your investment capital from stocks, bonds or funds. Asking institutions to move their money out of oil, coal and gas companies.	The WFAA divest their investments from fossil fuel industries.	Provide an environment for students that demonstrates UW's commitment to sustainability and support for BIPOC communities.	The WFAA is their own governing board and divestment is still being researched on the benefits/drawback s in the long term.
Social Sustainability	Social sustainability needs to be the tenet in all university decision making and	Creating inclusive environments, working towards environmental	Increasing students' involvement with sustainability,	Leaders' unwillingness to listen or care enough about

	interwoven into every proposed initiative, not treated as a separate entity	justice, and ensuring students from identity-based student organizations and/or backgrounds are heard.	reducing inequalities, and fostering equitable social development	social sustainability to make it a priority in all university decisions
Sustainability Integration	Recognizing sustainability as a core value on campus and integrating sustainable voice in campus decision-making	Formalization of SAC priorities within campus planning; inclusion of sustainability in department budgets	More funding and visibility for sustainable projects; clearer channel for voicing sustainability concerns	Changing campus culture is a long process that requires patience and determination

Three focus areas within Planning/Administration: Sustainable Investments, Social Sustainability, and Sustainability Integration, and their respective initiatives, were uniformly decided by the Student SAC Subcommittee to be top priorities in order to further sustainability on campus. Firstly, sustainable investments need to be a priority in order to foster UW's commitment to sustainability and support of BIPOC communities. Secondly, social sustainability needs to be the tenet in all university decision making and interwoven into every proposed initiative. Prioritizing social sustainability will have positive student benefits such as increasing students' involvement with sustainability, reducing inequalities, and fostering equitable social development. Finally, sustainability integration is required in order to implement sustainability as a core value on campus. Achieving sustainability integration would formalize SAC priorities by integrating sustainable voices in on-campus decision making, result in more funding and visibility for sustainable projects, and provide a clearer channel for voicing sustainability concerns. Evidently, it is in the best interest of UW-Madison's faculty, students, and community to prioritize initiatives in Sustainable Investments, Social Sustainability, and Sustainability Integration to advance sustainability efforts and the WI idea.

5.c. Listening Session Summary

Sustainability Advisory Council – Fall Listening Session Summary

Listening Session #1A: *October 14th*, 2020 12:00pm – 1:00pm

Listening Session #1B (students only): October 15th, 2020 7:00pm – 8:00pm

Listening Session #1C: *October* 20th, 2020 7:00pm – 8:00pm

Full recordings available here

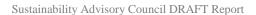
Listening Session Structure

Three listening sessions were offered to solicit input from university and community members on the structure of and outcomes from the Sustainability Advisory Council (SAC). Listening sessions included a short introduction outlining the current SAC process and a story illustrating how UW–Madison might take a systems approach to sustainability. The majority of the time was devoted to small group discussions (~5 attendees) reflecting on two questions:

- 1. Imagine that UW-Madison is doing everything right when it comes to sustainability. Now it is 2035, what is different?
- 2. In order to achieve the vision we just discussed, what are the most important sustainability priorities for the University to consider?

Facilitators guided the small group discussions and took notes. For stakeholders unable to attend one of the live listening sessions, a survey was made available to collect their response to the same questions.

Below is a summary of listening session discussions and survey responses. Numbers included after each comment indicates the number of times a topic was brought up during a listening session or in a survey response.



Themes and Notes

I. SAC Process

- a. Framing the Work of the SAC
 - Create a sense of urgency (x4)
 - Setting priorities comes from a limited resource mindset, how do we make progress at all levels? (x2)
 - o Acknowledge that priorities may differ by school / college / department
 - Remember that sustainability is tied to ethics (x2)
 - Look to design thinking as a model (x1)
- b. Context for the Work of the SAC
 - Highlight our unique natural setting (on an isthmus) as a strength (x3)
 - Recognize that UW–Madison is part of a broader whole (x1)
 - o Community; City; State; Natural Systems (e.g., lakes)
- c. Voices in the Process
 - Incorporate values and perspectives from other cultures (x8)
 - Don't discard what has been handed down in the name of coming up with new ideas
 - Prioritize student voices (x3)
 - Look to UW–Madison's research experts and incorporate their work into operations (x2)
 - Center impacted communities (x1)

II. SAC Results

- a. Align Incentives
 - Incentivize community members to be a part of whatever changes are made in the future (x7)
 - Solutions need to build collaboration across units and with regulators and the private sector
 - o Can these efforts reduce the hierarchical nature of our institution's culture?
 - Make the sustainable option the preferred option take the burden of decision away from the end user (x5)
 - But also recognize that increased costs cannot be passed onto the end user without addressing potential equity impacts
- b. Show Progress
 - Make sure goals are measurable and public (x7)
 - o Show support for the SAC by funding the priorities,
 - o Communicate that these costs enable lower total cost in the long run
 - Find quick wins and ways to counter feeling disheartened by the pace of change (x3)
 - o Identify practical approaches and things stakeholders can do right now
 - Prioritize solutions that are visible to the community (not just the university community) to foster awareness and perhaps lead to broader behavior changes

III. Priorities

- a. Academics
 - Require all freshmen (and/or degree programs) to include at least one sustainability course (x9)
 - o Ensure it is required across all schools
 - Include indigenous history as a part of the course(s)
 - O Connect the course content to UW–Madison's local ecosystems
 - o Include community members / organizations in the course(s)

- Create new sustainability First Year Interest Groups (x1)
- Establish a center or school for sustainability (x1)
- Develop new cluster hires or seed grants focused on sustainability issues (x1)

b. Engagement

- Build a culture of sustainability (x9)
 - Provide a more centralized way for students to connect around issues of sustainability
 - Build a collective mindset and find ways to consistently tell our collective story
 - Ultimately make the Office of Sustainability obsolete
- Bring sustainability into athletics and athletics' events (x2)
 - Transition to zero waste athletic events
- Transition all on-campus events to zero waste and refuse unnecessary materials from vendors (x2)
 - Operationalize the Fair Trade resolution
- Extend on-campus collaborations to include all UW System schools (x1)

c. Operations

- Become zero waste (x18)
 - o Focus on refusing materials before reusing or recycling
 - o Eliminate plastic waste, particularly single-use plastics (e.g., water bottles)
 - Expand composting across campus
 - Reduce waste from labs
- Net zero carbon for electricity and energy or 100% renewable energy (x17)
- Green buildings and developments (x12)
 - Including: increased tree canopy; return stormwater to native conditions; include community gardens, green roofs, and rooftop solar
 - Work with community stakeholders to enable a holistic approach to sustainable development
- Support sustainable transportation options (x9)
 - o Foster electric transportation options and implement supporting infrastructure
 - Track and report on fuel use and emissions from UW–Madison's vehicle fleet
 - o Greatly limit or eliminate building new parking lots
 - Expand mass transit and create walkable streets
- Source sustainable food that is healthy, local, and culturally-appropriate (x7)
- Create new and accessible green space (especially outdoor accessible spaces in the shoulder months) (x5)
- Implement sustainable lighting opportunities, including LEDs and occupancy sensors (x2)
- Include sustainability requirements in purchasing contracts (e.g., cradle to cradle)
 (x2)
- Install new water efficient fixtures (e.g., low flow toilets) (x1)

d. Planning and Administration

- Create a safe and welcoming environment for BIPOC students and faculty (x7)
- Completely divest from fossil fuels and reinvest in sustainable energy (x4)
- Remove historical markers of racism (e.g., Lincoln Statue, Chamberlin Rock) (x4)
- Support on-going work-from-home opportunities and ensure it is a sustainable alternative (x3)

- Create opportunities for teams and classes to be together but look at opportunities to reduce office, conference, or classroom space
- Create transparency in the investment portfolio (x1)
- Prioritize wellness in how we build and maintain our physical environment (x1)
- Intentionally provide a more substantial acknowledgement of the Ho-Chunk people (x1)
 - o Consider land reparations and scholarships

Sustainability Advisory Council – Spring Listening Session Summary

Listening Session #2A: *March* 18th, 2020 12:00pm – 1:00pm Listening Session #2B: *March* 23rd, 2020 7:00pm – 8:00pm

Listening Session #2C (students only): March 25th, 2020 7:00pm – 8:00pm

Full recordings available here

Listening Session Structure

Since beginning its work in October of 2020, the Sustainability Advisory Council (SAC) has reviewed specific categories of campus sustainability as defined by the Sustainability Tracking, Assessment, and Rating System (STARS): Academics, Engagement, Operations, and Planning & Administration. For each category, the SAC developed, reviewed, and created a list of prioritized Focus Areas.

Three listening sessions were offered to solicit input from university and community members on these prioritized Focus Areas. Listening sessions included a short introduction summarizing the work of the SAC, the STARS categories, and the prioritized Focus Areas. The majority of the time was devoted to group discussions organized around the four STARS categories. In each group attendees responded to three questions:

- 1. What do you like about the SAC's prioritized Focus Areas?
- 2. What don't you like about the SAC's prioritized Focus Areas?
- 3. What would you change about the SAC's prioritized Focus Areas?

Facilitators guided the group discussions and took notes. For stakeholders unable to attend one of the live listening sessions, a survey was made available to collect their response to the same questions.

Below is a summary of listening session discussions and survey responses. If a topic was raised multiple times during a listening session or in a survey response, a number is included in parentheses next to the topic.

Themes and Notes

I. Support for Focus Areas

- a. Overall
 - Very well thought out
- b. Academics
 - Sustainability Institute (x2)
 - o Good framework to bring together sustainability efforts across divisions
 - o Sustainability should be a campus-wide effort, cross-disciplinary
 - Sustainability Learning Requirement
 - o There is a push for this in the business school
 - o Like the idea of this being an activity, not a course
 - Sustainability Research
 - Always needed as we reach the climate tipping point
 - Campus as Living Lab
 - Ties learning (and perhaps a learning requirement) to our "place"
 - Honors & Recognition
 - o Rewards are good but the ongoing effort is more important
 - Low priority here makes sense (x2)
 - o Getting recognition from leadership is important
- c. Engagement
 - Nature is an important educational environment
 - Sustainability Leadership & Advocacy
 - o Good opportunity for collaboration & learning from peers
 - o Should be a top priority (x2)
 - Sustainable Athletics (x2)
 - Good opportunity to amplify our efforts
 - Sustainable Events
 - A chance to show-0ff
 - Alumni Engagement
 - Important that we use all our resources
- d. Operations
 - Sustainable Planning and Design
 - Green Energy and Electricity
 - Action items developed
 - Monitoring building energy use
 - Campus as a model for how to do this (x2)
 - Sustainable Food
 - Should also address replacing labor with plastic / packaging
 - Connecting to farms
 - Sustainable Procurement
 - Integration with social justice
 - o End sourcing from prison labor
- e. Planning & Administration
 - Support for all and much inter-relation in this group
 - Sustainability Integration
 - Key to making SAC priorities happen (x2)
 - Social Sustainability
 - o Important to include every voice
 - Sustainable Investments (x2)
 - o Good way to align SAC with governance bodies on campus
 - Green Revolving Fund

o Good initiative, not really a Focus Area, should be off the list (x2)

II. Focus Areas that Should be Higher Priorities

- a. Academics
 - Campus as a Living Lab
 - Need to lead in putting learning into practice
 - Sustainability Learning Requirement
- b. Engagement
 - Sustainability Onboarding and Training
- c. Operations
 - Sustainable Food
- d. Planning and Administration
 - Sustainable Investments (x4)
 - Employee Engagement
 - o This is a problem that all should be involved in solving

III. Items that are Missing

- a. Overall
 - Acknowledgement of the settler-colonialism framework in this process (x3)
 - Recognize other cultures and worldviews (x5)
 - Include the knowledge of those who have lived in this place long before colonialism
 - Also in the education students receive
 - There are links between sustainability and wellness (for our whole community, the plants and animals that comprise our living world) (x5)
 - An enforcement plan and/or plan to ensure action against the strategy (x4)
 - Assessment through implementation
 - Metrics and KPIs (x2)

b. Academics

- How do we change the narrative that sustainability courses are only environmental courses? (x2)
- Sustainability Institute, Sustainability Faculty, and Campus as a Living Lab need to be better explained
- Nothing focuses on graduate students
- How do we build a campus-wide effort to educate and engage on sustainability? (x2)
 - Students have to seek it out but shouldn't have to find the time and effort to engage in this topic
 - o How do we do this on such a decentralized campus?
- Don't force sustainability into courses where it doesn't add value / broaden the learning substantially
- Mental health impacts and considerations
- Financial impacts on students (don't increase costs to add a sustainability requirement)
- Incorporating Environmental Justice in Courses
- Diversity in faculty
- How do we implement (on campus) the leading research from our campus?
- c. Engagement
 - Should student org leaders be required to have sustainability training?
 - Should alumni engagement be combined with student engagement
 - A culture of sustainability needs to be embedded throughout campus

 Not just advocating for policies but finding was to overcome state / administrative barriers

d. Operations

- Biodiversity (more than pollinators, also plants and soils)
- Water (stormwater and water quality)
- Low-hanging fruit for buildings
 - LEDs; low-flow fixtures; training for efficient operations (e.g., window use); building automation
- Incentives to purchase better / more efficient items (not always the cheapest) (x2)
- Freezer program similar to biosafety cabinet program
- More bike support infrastructure (racks, lockers, year-round biking support, place to change clothes)
- Improve sustainability of current energy sources before switching supply of energy
 Investing in our own infrastructure
- Include footprint reduction / understanding of new space needs in master planning
- Build for longevity
- Set more tangible goals (e.g., % clean / renewable energy) (x2)
 - STARS Platinum
 - Second Nature Climate Commitment
- Incorporate native land practices
- Include more culturally relevant food options
- e. Planning & Administration
 - Coordination across units (perhaps a map of how they intersect with sustainability priorities)
 - Social Sustainability / Diversity should not be a single recommendation, consider distributing across all areas (x4)
 - o Ensure funding for these initiatives
 - Add public health to social sustainability

IV. Implementation Considerations

- a. Overall
 - Incentives are important to spur action, particularly for students
 - These changes require mindset changes, this is hard work and we should acknowledge the effort required
 - It is important to listen to, and learn from, students
 - Inclusivity, and intentional inclusivity is vital
 - Connect and collaborate with the City and other Non-profits
 - Clarify how they relate to STARS
- b. Academics
 - These shouldn't be a burden on students / faculty, implementation should allow flexibility (x2)
- c. Engagement
 - Mass communication is very difficult in our decentralized system
 - Communication is good but action is better

5.d. STARS Gap Analysis

UW-Madison completed its first STARS report in August of 2019. The below tables includes a comparison of the results of this assessment with the Big10 Schools that have completed an unexpired STARS report²³ as well as a group of representative peer universities²⁴. The sections following this table include detailed reviews of those credits where UW-Madison had a large gap from its peers. These reviews include example best practices from high scoring peer universities.

STARS Credit	Total Points Available	UW- Madison Score	Average Peer Score	Difference	Average Big10 Score	Difference
AC 1: Academic Courses	14	5.88	9.79	-3.91	7.26	-1.38
AC 2: Learning Outcomes	8	1.06	3.08	-2.02	3.67	-2.61
AC 3: Undergraduate Program	3	3.00	3.00	0.00	3.00	0.00
AC 4: Graduate Program	3	3.00	3.00	0.00	3.00	0.00
AC 5: Immersive Experience	2	2.00	2.00	0.00	2.00	0.00
AC 6: Sustainability Literacy Assessment	4	0.00	1.71	-1.71	2.33	-2.33
AC 7: Incentives for Developing Courses	2	0.00	1.81	-1.81	1.83	-1.83
AC 8: Campus as a Living Laboratory	4	4.00	3.94	0.06	4.00	0.00
AC 9: Research and Scholarship	12	5.65	10.28	-4.63	9.70	-4.05
AC 10: Support for Research	4	3.00	3.76	-0.76	3.75	-0.75
AC 11: Open Access to Research	2	0.00	1.14	-1.14	1.25	-1.25

Table 16. Academics & Research Gap Analysis; Legend: ■ = Below Peer Group; ■ = Above Peer Group

²³ Indiana University Bloomington; Michigan State University; Northwestern University; The Ohio State University; Pennsylvania State University; University of Illinois, Urbana-Champaign; University of Iowa; University of Maryland, College Park; University of Michigan; University of Minnesota, Twin Cities; University of Nebraska – Lincoln

²⁴ Cornell University; Emory University; Iowa State University; Northwestern University; Penn State; Stanford University; University of California, Berkeley; University of California, Irvine; University of California, San Diego; University of Cincinnati; University of Colorado Boulder; University of Georgia; University of Illinois at Chicago; University of Illinois Urbana-Champaign; University of Michigan; University of Missouri; University of North Carolina at Chapel Hill; University of Texas at Austin; The University of Utah; University of Virginia; University of Washington

STARS Credit	Total Points Available	UW- Madison Score	Average Peer Score	Difference	Average Big10 Score	Difference
EN 1: Student Educators Program	4	0.69	3.05	-2.36	3.20	-2.51
EN 2: Student Orientation	2	0.00	1.78	-1.78	1.82	-1.82
EN 3: Student Life	2	2.00	1.96	0.04	2.00	0.00
EN 4: Outreach Materials and Publications	2	2.00	2.00	0.00	2.00	0.00
EN 5: Outreach Campaign	4	4.00	4.00	0.00	3.83	0.17
EN 6: Assessing Sustainability Culture	1	0.00	0.50	-0.50	0.33	-0.33
EN 7: Employee Educators Program	3	0.01	1.62	-1.61	1.48	-1.47
EN 8: Employee Orientation	1	0.02	0.90	-0.88	0.86	-0.84
EN 9: Staff Professional Development	2	0.00	1.21	-1.21	1.27	-1.27
EN 10: Community Partnerships	3	3.00	3.00	0.00	3.00	0.00
EN 11: Inter-Campus Collaboration	3	2.50	2.90	-0.40	2.63	-0.13
EN 12: Continuing Education	5	0.55	3.37	-2.82	3.58	-3.03
EN 13: Community Service	5	2.59	2.64	-0.05	2.52	0.07
EN 14: Participation in Public Policy	2	1.33	1.78	-0.45	1.72	-0.39
EN 15: Trademark Licensing	2	2.00	1.81	0.19	2.00	0.00

Table 17. Engagement Gap Analysis; Legend: ■ = Below Peer Group; ■ = Above Peer Group

STARS Credit	Total Points Available	UW- Madison Score	Average Peer Score	Difference	Average Big10 Score	Difference
OP 1: Greenhouse Gas Emissions	10	4.16	4.77	-0.61	3.76	0.40
OP 2: Outdoor Air Quality	1	0.50	0.95	-0.45	0.92	-0.42
OP 3: Building Operations and Maintenance	5	0.01	1.46	-1.45	1.18	-1.17
OP 4: Building Design and Construction	3	0.63	2.11	-1.48	1.54	-0.91
OP 5: Building Energy Consumption	6	3.51	3.26	0.25	2.86	0.65
OP 6: Clean and Renewable Energy	4	0.06	0.38	-0.32	0.22	-0.16
OP 7: Food and Beverage Purchasing	6	0.40	0.62	-0.22	0.20	0.20
OP 8: Sustainable Dining	2	1.88	1.88	0.00	1.61	0.27
OP 9: Landscape Management	2	0.00	0.98	-0.98	0.78	-0.78
OP 10: Biodiversity	1	2.00	0.90	1.10	0.92	1.08
OP 11: Sustainable Procurement	3	2.00	2.19	-0.19	1.92	0.08
OP 12: Electronics Purchasing	1	0.99	0.60	0.39	0.54	0.45
OP 13: Cleaning and Janitorial Purchasing	1	0.24	0.62	-0.38	0.62	-0.38
OP 14: Office Paper Purchasing	1	0.58	0.35	0.23	0.30	0.28
OP 15: Campus Fleet	1	0.05	0.22	-0.17	0.13	-0.08
OP 16: Student Commute Modal Split	2	1.87	1.61	0.26	1.28	0.60
OP 17: Employee Commute Modal Split	2	0.98	0.90	0.08	0.55	0.43
OP 18: Support for Sustainable Transportation	2	2.00	1.93	0.07	1.83	0.17
OP 19: Waste Minimization and Diversion	8	3.58	3.27	0.31	2.55	1.03
OP 20: Construction and Demolition Waste Diversion	1	0.59	0.75	-0.16	0.54	0.05
OP 21: Hazardous Waste Management	1	1.00	0.93	0.07	0.81	0.19
OP 22: Water Use	4	4.48	2.53	1.95	1.73	2.75
OP 23: Rainwater Management	2	1.00	1.86	-0.86	1.75	-0.75

Table 18. Operations Gap Analysis; Legend: ■ = Below Peer Group; ■ = Above Peer Group

STARS Credit	Total Points Available	UW- Madison Score	Average Peer Score	Difference	Average Big10 Score	Difference
PA 1: Sustainability Coordination	1	1.00	1.00	0.00	0.92	0.08
PA 2: Sustainability Planning	4	2.50	3.61	-1.11	3.00	-0.50
PA 3: Participatory Governance	3	1.50	2.27	-0.77	1.85	-0.35
PA 4: Diversity and Equity Coordination	2	1.33	1.74	-0.41	1.59	-0.26
PA 5: Assessing Diversity and Equity	1	1.00	0.94	0.06	0.92	0.08
PA 6: Support for Underrepresented Groups	3	1.92	2.95	-1.03	2.69	-0.77
PA 7: Affordability and Access	4	3.28	3.25	0.03	2.82	0.46
PA 8: Committee on Investor Responsibility	2	0.00	0.60	-0.60	0.33	-0.33
PA 9: Sustainable Investment	4	0.00	0.84	-0.84	0.43	-0.43
PA 10: Investment Disclosure	1	0.00	0.17	-0.17	0.00	-0.00
PA 11: Employee Compensation	3	1.29	1.05	0.24	1.30	-0.01
PA 12: Assessing Employee Satisfaction	1	0.63	0.68	-0.05	0.75	-0.12
PA 13:Wellness Program	1	1.00	1.00	0.00	0.92	0.08
PA 14: Workplace Health and Safety	2	0.75	0.77	-0.02	0.82	-0.06

Table 19. Planning & Administration Gap Analysis; Legend: ■ = Below Peer Group; ■ = Above Peer Group

AC1: Academic Courses

Points: 14

UW-Madison:	5.88
Peer Group:	9.93
Big 10:	7.26
UW-System:	7.80
Overall:	8.11

Highest Scoring Universities from Peer Group:

•	University of Colorado Boulder:	14.00
•	Iowa State University	14.00
•	University of Missouri:	14.00
•	University of North Carolina at Chapel Hill:	13.84
•	University of California, Irvine:	13.63
•	Stanford University:	12.20
•	University of Washington, Seattle:	12.15
•	Cornell University:	11.92
•	University of Illinois at Chicago:	11.50

• UW-Madison scored higher than 2/21 universities from the peer group

Credit Description

This credit recognizes institutions that provide courses throughout their curriculum which either focus on sustainability or include sustainability.

Criteria

- <u>Sustainability Course Offerings</u>: Includes (1) **sustainability courses** (2) **courses that include sustainability**
 - 1. <u>Sustainability Courses</u>: Courses which have sustainability as a primary and explicit focus or solve/understand at least one major sustainability challenge. This includes:
 - o Foundational courses with a primary and explicit focus on sustainability
 - Ex: Introduction to Sustainability, Sustainable Development
 - o Courses with a primary and explicit focus on applying sustainability to a specific field
 - Ex: Sustainable Business, Architecture for Sustainability
 - Courses with a primary focus on providing skills/knowledge directly related to solving/understanding a major sustainability challenge. Such courses may not cover sustainability as a concept, but address more than one of the three dimensions of sustainability (social wellbeing, economic prosperity, and environmental health)
 - Ex: Climate Change Science. Renewable Energy Policy, Green Chemistry

- 2. <u>Courses That Include Sustainability</u>: Courses that focus on non-sustainability topics, but include a unit/module on sustainability or a sustainability challenge, include sustainability-focused activities, or integrate sustainability throughout the class
 - o The inclusion of sustainability should be documented in course descriptions or syllabi

Scoring

Part One (8 points): Percentage of courses offered that are sustainability course offerings

- Maximum points are earned when 20% or more of all courses are sustainability course offerings
- Incremental points are available based on percentage

Course type	Factor	Multiply	Number of courses offered of each type	Divide	Total number of courses offered by the institution	Equals	Points earned
Sustainability courses	40				÷	=	
Courses that include sustainability	40	×		*		-	
Total points earned →					Up to 8		

Part Two (6 points): Percentage of academic departments with sustainability course offerings

- Maximum points are earned when 90% or more of academic departments offer at least one sustainability course offering
- Incremental points are available based on percentage

Factor	Multiply	Number of departments with sustainability course offerings	Divide	Total number of departments	Equals	Points earned
6 7/ 3	×		÷		п	Up to 6

Changes from $v.2.1 \rightarrow v.2.2$

None!

University of Wisconsin-Madison ----- 5.88/14.00

- Percentage of courses that are sustainability course offerings: 6.05%
- Percentage of academic departments with sustainability course offerings: 51.97% (79/152)

University of Colorado Boulder ----- 14.00/14.00

- Percentage of courses that are sustainability course offerings: 25.21%
- Percentage of academic departments with sustainability course offerings: 100% (50/50)
- "CU's department of Data Analytics assayed all coursework that was offered using our
 previously established sustainability definitions. Courses were analyzed directly from
 registrar's database of courses offered and taken."

University of Missouri ------ 14.00/14.00

- Percentage of courses that are sustainability course offerings: 22.70%
- Percentage of academic departments with sustainability course offerings: 97.94% (95/97)
- "The definition of sustainability as provided by STARS was used to designate sustainability courses and courses that included sustainability content."

University of North Carolina at Chapel Hill ----- 13.84/14.00

- Percentage of courses that are sustainability course offerings: 20.39%
- Percentage of academic departments with sustainability course offerings: 87.67% (64/73)
- "The registrar's office provided a searchable description of each course which was matched against the sustainability keyword list developed to conduct the research inventory."
 - A list of 186 sustainability keywords, developed by the Sustainability Advisory Committee, was used

AC2: Learning Outcomes

Points: 8

UW-Madison :	1.06
Peer Group:	3.07
Big 10:	3.67
UW-System:	4.07
Overall:	2.81

Highest Scoring Universities from Peer Group:

•	University of California, Irvine:	8.00
•	Stanford University:	8.00
•	University of Illinois, Urbana-Champaign:	8.00
•	Iowa State University	7.84
•	University of Cincinnati:	6.19
•	University of Georgia:	5.95
•	University of California, Berkeley:	5.93
•	Cornell University:	2.36

• UW-Madison scored **higher** than 6/21 universities from the peer group

Credit Description

This credit recognizes institutions that have sustainability learning outcomes within degree programs and/or courses of study.

Criteria

- Students graduate from degree programs that incorporate sustainability as a learning outcome or sustainability learning outcomes
- Sustainability learning outcomes may be included in four different levels:
 - o **Institution** level (all students)
 - o **Division** level (one or more schools/colleges)
 - o **Program** level (all students from a degree program)
 - Course level (if course is sustainability focused/related and required to complete a degree program)
- Includes undergraduate and graduate degree programs
- <u>Sustainability Learning Outcome</u>: Statement that summarizes the specific sustainability knowledge and skills that are expected to be gained from a program/course
 - May not use the term "sustainability", as long as they address sustainability as an integrated concept
 - Ex: "Students will have an understanding of the carrying capacity of ecosystems"

Scoring

8 points: Percentage of all students who graduate from programs that have at least sustainability learning outcome

- Maximum points are earned when 100% of students graduate from programs that have at least one sustainability learning outcome
- Incremental points are available based on percentage

Factor	Multiply	Number of students that graduate from programs that have adopted at least one sustainability learning outcome	Divide	Total number of graduates	Equals	Points earned
8	×		÷		п	Up to 8

Changes from $v.2.1 \rightarrow v.2.2$

Split into two parts:

- *Part One (6 points):* Institutional Sustainability Learning Outcomes
 - Institution has one or more sustainability learning outcomes that apply to all students.
 These learning outcomes may either be focused on sustainability or supportive of sustainability
 - o Maximum points are earned when institution has one or more sustainability-focused learning outcome that applies to all students
 - o Partial points are available if institution has learning outcomes that are supportive of sustainability (2 points)
- Part Two (8 points): Program-Level Sustainability Learning Outcomes
 - Students graduate from degree programs that:
 - Are identified as sustainability-focused programs (identified in AC3 & AC4)
 - Have one or more sustainability-focused learning outcome
 - Require a sustainability-focused course (identified in AC1)
 - o Maximum points are earned when 100% of students graduate from degree programs that require an understanding of sustainability
 - o Incremental points are available based on percentage
- Both parts are scored together, with a maximum of 8 points being available for the credit

University of Wisconsin-Madison ----- 1.06/8.00

- Percentage of students who graduate from programs that have adopted at least one sustainability learning outcome: 13.25% (1909/14408)
- Sustainability learning outcomes at the **institution** level: **No**
- Sustainability learning outcomes at the **division** level: **No**
- Sustainability learning outcomes at the **program** level: **Yes**

University of California, Irvine ----- 8.00/8.00

- Percentage of students who graduate from programs that have adopted at least one sustainability learning outcome: 100% (9392/9392)
- Sustainability learning outcomes at the **institution** level: **Yes**
- Sustainability learning outcomes at the **division** level: **No**
- Sustainability learning outcomes at the **program** level: **Yes**
- **Institution level** sustainability learning outcomes:
 - (1) Understand the fundamental environmental, social, and economic issues underlying sustainability
 - All students are exposed to sustainability through two required general education courses with learning outcomes that address the fundamental science and societal aspects of sustainability
 - o (2) Enhance the student learning experience through the integration of sustainability principles into collaborative learning, practices, and operations ²⁵
 - o (3) Deepen the learning experience associated with sustainability to align with the needs of students as they leave the University ²⁶
 - o https://sustainability.uci.edu/education/learning-outcomes/

Iowa State University ----- 7.84/8.00

- Percentage of students who graduate from programs that have adopted at least one sustainability learning outcome: 98.03% (8197/8362)
- Sustainability learning outcomes at the **institution** level: **No**
- Sustainability learning outcomes at the **division** level: **Yes**
- Sustainability learning outcomes at the **program** level: **Yes**
- **Division level** sustainability learning outcomes:
 - o Explain the physical and biological interactions within ecosystems
 - Explain how human activities impact the environment and how societies are affected by environmental change
 - o Articulate how personal life experiences and choices fit within the larger context
 - o Advance environmental sustainability

²⁵

[•] Recognize that significant societal challenges including health, energy, food, climate, and water, are addressed through interdisciplinary academic collaboration

[•] Experience problem solving and collaboration using the campus as a living laboratory for sustainability

[•] Learn to apply sustainability principles into all aspects of campus life and operations

[•] Experience working together with students in converging fields to foster collaboration between disciplines to arrive at solutions

²⁶

[•]Develop an ethos of sustainability from in-classroom and outside of classroom learning

[•]Learn to embrace sustainability as an everyday part of student life and leadership through the collaboration of academic sustainability learning outcomes with Student Affairs leadership learning outcomes that integrate the environmental and social aspects of sustainability

- o Confirm the value of every person and treats people equitably, ethically, and with respect
- Articulate and demonstrate a clear concept of a just society in which societal benefits are equitably shared
- o Etc.
- **Program level** sustainability learning outcomes:
 - o Recognize ethical, legal, and global implications in business
 - o Recognize the benefits and challenges of diversity
 - Communicate and apply biological principles and global perspectives in an ethical manner to issues in human society
 - Explain the ecological, economic, and social consequences that reasonably could be expected to occur as the result of actions taken to address the issue
 - Understand how genetic concepts affect broad societal issues including health and disease, food and natural resources, environmental sustainability, etc.
 - o Etc.

University of Illinois, Urbana-Champaign ----- 8.00/8.00

- Percentage of students who graduate from programs that have adopted at least one sustainability learning outcome: 100% (13043/13043)
- Sustainability learning outcomes at the **institution** level: **Yes**
- Sustainability learning outcomes at the **division** level: **No**
- Sustainability learning outcomes at the **program** level: **Yes**
- Institution level sustainability learning outcomes:
 - Out of five core learning outcomes, two specifically relate to sustainability and combine to address the field as a whole:
 - Social Awareness and Cultural Understanding: Students develop a critical and reflective orientation toward such social and cultural differences as race, indigeneity, gender, class, sexuality, language, and disability
 - Global Consciousness: Students discover how complex, interdependent global systems—natural, environmental, social, cultural, economic, and political—affect and are affected by the local identities and ethical choices of individuals and institutions

AC6: Sustainability Literacy Assessment Points: 4

UW-Madison:	0.00
Peer Group:	1.71
Big 10:	2.33
UW-System:	1.34
Overall:	1.01

Highest Scoring Universities from Peer Group:

•	University of Colorado Boulder:	4.00
•	Emory University:	4.00
•	Stanford University:	4.00
•	University of Washington, Seattle:	4.00
•	University of Michigan:	4.00
•	Northwestern University:	4.00

- 6/21 peer universities scored 2.00/4.00
- 9/21 peer universities scored 0.00/4.00

Credit Description

This credit recognizes institutions that assess the sustainability literacy of their students.

Criteria

- <u>Sustainability Literacy</u>: Knowledge about shared sustainability challenges, and ways to create solutions to those challenges
- Sustainability literacy assessments not only focus on the respondents' knowledge of sustainability topics and challenges, but should also assess their understanding of how social, economic, and environmental issues are interconnected
 - o Should not be exclusive to the environment and environmental problems
 - Should not be exclusive to an institution's sustainability culture or sustainabilityrelated student engagement
- Institutions may use a single campus-wide assessment, or multiple assessments that target different groups
- Most commonly done through surveys



Scoring

4 points: An assessment of sustainability literacy is administered to either the entire student body, or a subset of students. This assessment may be administered once (as a pre- assessment) or twice (as a pre- and post- assessment)

- Maximum points are earned when a pre- and post- assessment is administered to the entire student body (or at minimum all undergraduate students), either directly or by representative sample
 - o Pre- and post- assessment is administered to the same group
 - o <u>Representative Sample</u>: Subset of members from the population that accurately reflects the entire population. It is important that this subset is unbiased
- Partial points are available for:
 - Administering only a pre- assessment
 - o Sampling only a subset of students that may not be representative of population

Attributes of the sustainability literacy assessment (points awarded)				
An assessment of sustainability literacy is: Administered to the entire student body or, at minimum, to the institution's predominant student body (e.g., all undergraduate students), directly or by representative sample. (2 points) Or Administered to a subset of students (e.g., students enrolled in a sustainability program) or a sample of students that may not be representative of the institution's predominant student body (e.g., graduate and not undergraduate students). (1 point)				
 Administered as a pre- and post-assessment to the same cohort of students or to representative samples in both the pre-test and post-test. 	× 2			
Total points earned →	Up to 4			

Changes from $v.2.1 \rightarrow v.2.2$

None!

University of Wisconsin-Madison ----- 0.00/4.00

• Does the institution conduct an assessment of the sustainability literacy of its students (i.e. an assessment focused on student knowledge of sustainability topics and challenges)?: **No**

University of Colorado Boulder ----- 4.00/4.00

- The assessment is administered to: The entire (or predominate) student body
- The assessment is administered as a: **Pre- and post- assessment**
- https://reports.aashe.org/institutions/university-of-colorado-at-boulder-co/report/2018-03-23/AC/curriculum/AC-6/
 - There is an excel file containing the questions included in the sustainability literacy assessment
- The original literacy assessment was developed in 2009 with the help of an assessment professional and Environmental Center staff. After reviewing other literacy assessments to observe best practices, it was then modified in 2017.
- Description of how a representative sample was reached and how the assessment(s) were administered:
 - o In Spring 2017, the literacy assessment was distributed to ~1200 currently enrolled students who had also participated in the incoming student survey in 2014
 - o In Fall 2017, the literacy assessment was distributed to a **representative sample** of all undergrad and grad students (~3500) and to a **representative sample** of faculty and staff (~1000).
 - o Qualtrics was used to administer the assessment

Emory University ----- 4.00/4.00

- The assessment is administered to: The entire (or predominate) student body
- The assessment is administered as a: **Pre- and post- assessment**
- https://reports.aashe.org/institutions/emory-university-ga/report/2017-07-25/AC/curriculum/AC-6/
 - There is a PDF file containing the questions included in the sustainability literacy assessment
- Assessment was developed with the intent of completion within 10 minutes, focusing on 4 areas of information:
 - Knowledge of areas of sustainability behavior change that are relevant to student lives
 - o Knowledge of Emory's topical sustainability initiatives
 - Sustainability identity and students' commitments as persons who care about sustainability (to assess shift over their time at Emory)
 - o Knowledge of sustainability topics and challenges.
- After the 2014 pilot surveys (developed by faculty from sociology, nursing, and anthropology), faculty added a new section to meet the criteria for both sustainability literacy and cultural assessments. Since 2016, the survey has been administered each year and followed up with the same representative sample of all students

- Description of how a representative sample was reached and how the assessment(s) were administered:
 - o Survey was distributed online
 - All undergraduate students starting in 2014
 - All graduate and undergraduate starting in 2015
 - o To enhance participation, there is a raffle for three \$100 gift cards.

University of Washington, Seattle ----- 4.00/4.00

- The assessment is administered to: The entire (or predominate) student body
- The assessment is administered as a: **Pre- and post- assessment**
- The questions used are from the Sulitest question set. Examples include:
 - Ozone forms a protective layer in the earth's upper atmosphere. What does ozone protect us from?
 - What is the name of the primary federal agency that oversees environmental regulation?
 - What is the primary benefit of wetlands?
 - What is the most common cause of pollution of streams and rivers?
 - Over the past three decades, what has happened to the difference between the wealth of the richest and poorest Americans?
 - Which of the following is an example of an environmental injustice?
 - Which of the following is the most commonly used definition of sustainable development?
- In 2017, UW Sustainability staff worked with students and faculty to develop the Sustainable Choices Survey, which assesses sustainability knowledge, opinions, and choices. This survey is available twice each year, communicated by campus-wide emails
 - Not all participants complete both surveys
 - Allows the ability to track responses over multiple years
- Description of how a representative sample was reached and how the assessment(s) were administered:
 - The survey is made available twice each academic year, summer & autumn quarters, and then again in spring quarter.
 - Students, staff, and faculty are invited to take the survey through several communication channels including email, social media, and listservs

AC7: Incentives for Developing Courses

Points: 2

UW-Madison:	0.00
Peer Group:	1.81
Big 10:	1.83
UW-System:	1.56
Overall:	1.36

Highest Scoring Universities from Peer Group:

- 19/21 peer universities scored 2.00/2.00
 - University of Illinois at Chicago & University of North Carolina at Chapel Hill scored 0.00/2.00

Credit Description

This credit recognizes institutions that offer incentives to staff who develop and expand their sustainability course offerings. These incentives may include release time, professional development funding, and institution provided training. Incentives assist staff on how to best incorporate sustainability in their courses.

Criteria

- Institution has an ongoing program that offers incentives to staff who either:
 - o Develop new sustainability courses
 - o Incorporate sustainability into existing courses
- The purpose of this credit is to increase sustainability learning in students across multiple departments; this should be a specific goal of the program
- Academic, non-credit, and continuing education courses are all included for this credit

Scoring

2 points: Institutions earn full points for meeting the criteria above. Partial points aren't available

Changes from $v.2.1 \rightarrow v.2.2$

None!

University of Wisconsin-Madison ----- 0.00/2.00

• Does the institution have an ongoing program or programs that offer incentives for faculty in multiple disciplines or departments to develop new sustainability courses and/or incorporate sustainability into existing courses?: **No**

University of Texas at Austin ----- 2.00/2.00

Program: Annual Sustainability Course Development Award

- **Open competition** for course development funds to create new sustainability undergraduate courses or to convert existing undergraduate courses to sustainability course offerings
- Courses require addressment and investigation of sustainability issues while incorporating an aspect of experiential learning
- Preference for courses that are designed to be interdisciplinary and are open to students from multiple colleges/majors
- Applications may come from any academic unit on campus ²⁷
- A proposed new course or course conversion must:
 - Incorporate sustainability as a distinct and significant course component/module or concentrate on a single sustainability topic/issue throughout the course
 - o Integrate the sustainability component with an experiential learning opportunity ²⁸
 - o Be offered at least three times beginning with either semesters
 - Preference is given to courses that are designed to be a regular part of the department's course offerings

Incentives:

- For awards that **develop new courses**: \$5,000 is given to the instructor to support costs associated with new course development²⁹; \$1,000 is given to the instructor's home department.
- For awards that **convert existing courses**: \$3,000 is given to the instructor to support costs associated with course conversion ³

Texas Sustainability Course Development Award Webpage

²⁷ Useful language that is used to explain the importance of sustainability across curriculum: "Sustainability is commonly understood to require a balanced pursuit of ecological health, social equity, and economic welfare. The pursuit of sustainability is grounded in an ethical commitment to the well-being of not only current populations, but also future generations. The concept of sustainability is broadly applicable to courses across the curriculum including topics such as environmental ethics, climate science, resource management, energy efficiency and technology, transportation and planning, as well as courses that speak to the history and philosophy of environmentalism, environmental health, environmental arts and performance, economic development, social justice, communication, and psychology."

²⁸ Useful language that is used to explain the importance of experiential learning: "Experiential learning offers students assignments and activities based on real-life situations or primary research that engage them in reflective, data-driven problem-solving with no predetermined right answers."

²⁹ Travel, books, research expenses, technology costs, etc.

University of Washington, Seattle ----- 2.00/2.00

Program: College of the Environment Cross Unit Teaching Incentive Fund

- One-time funding that focuses on **developing interdisciplinary and cross-unit courses** and promoting the expansion of offerings in the College of the Environment
 - o The content of these courses is sustainability-focused
- Minimum of 10 awards are given; 1-2 with higher end funding, 7-12 with lower-end
 - o Maximum of \$35,000 per project
 - Funding can be used to pay a TA, hire a part-time student services person, or develop a short course or summer program
- Webpage

Program: **UW Educational Outreach (UWEO)**

- Offers incentives for faculty to teach **fee-based classes**
 - o Similar to continuing education courses
- Faculty teach the classes in exchange for additional FTE tenure-track faculty resources
 - Faculty receive one month salary to develop online courses and a significant amount of excess compensation to teach fee-based classes
- Provides marketing, online instructional design, registration, financial and program administration services
- Sustainability and the environment are a top priority for program development

University of California-Irvine ----- 2.00/2.00

- UCI implements an ongoing program to support sustainability coursework development
 - Program provides support and incentives for faculty to develop sustainability coursework
 - o Goal of program is to boost climate change and sustainability education, especially for students whose curriculum doesn't include climate and sustainability as a focus
 - o Program includes skills-sharing workshops, financial incentives, and other support to encourage curriculum development
 - Workshops focus on training faculty to incorporate sustainability into courses, especially those in fields not typically associated with environmental studies
 - The "Teaching Climate and Sustainability" workshop discussed how faculty could incorporate climate and sustainability into their courses
 - The "Enhancing Climate and Sustainability Education Across the Curriculum" event allowed faculty who participated in the Teaching Climate and Sustainability Workshop to present their revised course materials
 - o Faculty members received \$1,000 to assist in course development through participate in the workshop above. An additional \$200 was received to participating in the event above

Program: Energize Colleges

- UCI sponsors the program, which includes financial and training support to faculty who create new courses or course modules on topics in sustainable energy
- The program offers implementation support, assistance in integrating project-based learning experiences into existing courses, curriculum design services, instructional planning, co-instruction, existing curriculum, curriculum adaptation and development support, and train-the-trainer workshops
- Grants up to \$5,000 are available
- Webpage

Program: Student Institute for Sustainability Leadership (SISL) Level 1 Program

- Three day residential program for incoming first year and transfer students
- Gives an introduction to the campus' carbon neutrality and sustainability community
- Addresses issues of social equity, regenerative economy, food systems, and ecological crises in California and around the world
- Introduces students to leadership qualities that develop awareness of the interdependence
 of all life, intersectionality, cultural narratives, collaborative problem solving, and
 systems thinking
- Webpage



AC9: Research and Development

Points: 12

UW-Madison :	5.65
Peer Group:	10.28
Big 10:	9.70
UW-System:	9.53
Overall:	8.30

Highest Scoring Universities from Peer Group:

•	University of California, Irvine:	12.00
•	University of California, San Diego:	12.00
•	Cornell University:	12.00
•	Iowa State University:	12.00
•	University of Missouri:	12.00
•	University of North Carolina at Chapel Hill:	12.00
•	Stanford University:	12.00
•	University of Cincinnati:	11.87
•	University of Michigan:	11.42
•	University of California, Berkeley:	11.33

• UW-Madison scored higher than 2/21 universities from the peer group

Credit Description

This credit recognizes institutions whose faculty conduct research that related to sustainability topics. This is measured through the percentage of faculty and departments that are engaged in sustainability research.

Criteria

- Institutions must run an inventory that identifies the amount of sustainability research that faculty have done over the previous three years
- <u>Sustainability Research</u>: Research with solutions that simultaneously support social wellbeing, economic prosperity, and ecological health
 - Research that either explicitly addresses sustainability, contributes directly towards a
 major sustainability challenge, or engages community members to achieve positive
 social, economic, and environmental outcomes (community-based research)
- Measured in two ways: (1) the percentage of faculty and (2) the percentage of academic departments that conduct sustainability research

Scoring

Part One (6 points): Percentage of total faculty that conduct sustainability research

- Maximum points are earned when ≥15% of faculty engage in sustainability research
- Incremental points are available based on percentage

Factor	Multiply	Faculty and staff engaged in sustainability research	Divide	Total faculty and staff engaged in research	Equals	Points earned
40	×		÷		Ш	Up to 6

Part Two (6 points): Percentage of academic departments with at least one faculty who conducts sustainability research

- Maximum points are earned when ≥75% of departments engage in sustainability research
- Incremental points are available based on percentage

Factor	Multiply	Departments that conduct sustainability research	Divide	Total number of departments that conduct research	Equals	Points earned
8	×		÷		ш	Up to 6

Changes from $v.2.1 \rightarrow v.2.2$

None!

University of Wisconsin-Madison ----- 5.65/12.00

- *Part One:* Percentage of faculty researchers that are engaged in sustainability research: 7.02% (153/2180)
- *Part Two:* Percentage of research-producing departments that are engaged in sustainability research: 35.53% (54/152)
- Description of the methodology that was used:
 - o First, we **developed a list of terms** derived from the STARS sustainability research definition and the UN Sustainable Development Goals
 - Next, using a list of FY18 research grants, we searched for research project titles that included these terms
 - o Then, a faculty-staff team from the **OS** reviewed each research project title (and description if necessary) to confirm that it was sustainability research. From here, a list was made of all faculty and staff who conduct sustainability research

 Finally, additional faculty that conduct sustainability research were identified by faculty and staff during review and validation of the STARS report

Stanford University ----- 12.00/12.00

- *Part One:* Percentage of faculty researchers that are engaged in sustainability research: 18.92% (426/2251)
- *Part Two:* Percentage of research-producing departments that are engaged in sustainability research: 79.55% (70/88)
- Description of the methodology that was used:
 - Information on faculty research was collected through databases maintained by Woods Institute for the Environment, the Precourt Institute for Energy, and the School of Earth, Energy, and Environmental Sciences.
 - Specific targeting of faculty/departments that are known to have sustainability research
 - Research from other schools was included by identifying departments that might include sustainability research. Descriptions of each faculty member's research were obtained and used to determine sustainability research

University of California, Irvine ----- 12.00/12.00

- *Part One:* Percentage of faculty researchers that are engaged in sustainability research: 16.93% (221/1305)
- *Part Two:* Percentage of research-producing departments that are engaged in sustainability research: 75.56% (34/45)
- Description of the methodology that was used:
 - o Faculty were surveyed via an online form.
 - Respondents were **given the definition of sustainability research**, and a link to UCI's most recent sustainability research inventory
 - Respondents were asked whether any research they had conducted within the past year met the definition of sustainability research
 - The survey was supplemented by a review of faculty websites, and sustainability researchrelated campus news releases
 - o The total number of departments was drawn from a Course Catalogue

University of Michigan ------ 11.42/12.00

- *Part One:* Percentage of faculty researchers that are engaged in sustainability research: 13.54% (852/6294)
- *Part Two:* Percentage of research-producing departments that are engaged in sustainability research: 87.14% (61/70)
- Description of the methodology that was used:
 - Each year, newly hired faculty are asked to complete a survey indicating whether their research is related to or focused on sustainability issues
 - Faculty that respond yes to this survey are **entered into an expert's database** and asked to **provide a paragraph** describing their relevant research
 - The status of these faculty are checked once per year
 - These faculty are emailed once per year to update if their research focus has changed



AC11: Open Access to Research

Points: 2

UW-Madison:	0.00
Peer Group:	1.14
Big 10:	1.25
UW-System:	0.22
Overall:	0.58

Highest Scoring Universities from Peer Group:

- 11/21 peer universities scored 2.00/2.00
- 2/21 peer universities scored 1.00/2.00
- 8/21 peer universities scored 0.00/2.00

Credit Description

This credit recognizes institutions that has policies/programs which ensure open access (free availability on the public internet) for peer-reviewed research from their faculty members

Criteria

- Institution has a **published open access policy** that ensures future **scholarly articles written by faculty are made available through a designated open access repository**
- Policies/programs adopted by the government or university system may count for this credit
- Policies that are strictly voluntary don't earn points unless there are financial incentives to support faculty with fees
- Policy may include an opt-out option for individual articles

Scoring

2 points:

- Maximum points are earned for having an open access policy that is available for all of an institution's departments
- Partial points are available for having an open access policy that is available for a partial amount of an institution's research-producing departments

Changes from $v.2.1 \rightarrow v.2.2$

Criteria: Open access publishing is facilitated in one of four ways:

- 1. Institution has an institutional repository that makes peer-reviewed scholarly work done by its employees freely available on the public internet
 - Repository may be managed by the institution or an outside source

- 2. Institution has a published policy that requires open access publishing
 - Employees may either publish their scholarly work as open access or deposit final versions of scholarly works in an open access repository
- 3. Institution provides open access article processing charge fund for employees
- 4. Institution provides open access journal hosting services
 - Peer-reviewed open access journals are hosted on local servers with no cost for publishing

Scoring: Maximum points are available for meeting 3/4 criteria above

Institution:	Points earned
A. Offers institutional open access repository hosting.	0.67
B. Has a published policy that mandates open access publishing.	0.67 (institution-wide policy) 0.33 (less comprehensive policy)
C. Provides an open access article processing charge (APC) fund.	0.67
D. Provides open access journal hosting services.	0.67
Total points earned →	Up to 2

University of Wisconsin-Madison ----- 0.00/2.00

• How many of the institution's research-producing divisions are covered by a published open access policy? (All, Some or None): **None**

University of Washington, Seattle ----- 2.00/2.00

- How many of the institution's research-producing divisions are covered by a published open access policy? (All, Some or None): **All**
 - o Is the open access policy mandatory or voluntary?: Mandatory
- Does the institution provide financial incentives to support faculty members with article processing and other open access publication charges?: **No**
- Open access policy was adopted in 2018 ³⁰
 - o Information on Open Access at University of Washington
 - o Link to their Open Access Repository

³⁰ Useful wording: University of Washington, Seattle considers the open access movement consistent with the mission and goals of the University and fully supports it. In addition, the University is supportive of the concept that the findings of all federally funded research should be made available to the public free of charge, and encourages all scholars and researchers to work toward the objective of rapid, free, voluntary dissemination of scholarly works to their peers and the public-at-large through open-access publications, after appropriate peer-review.

University of California: Berkeley, Irvine, San Diego ----- 2.00/2.00

- How many of the institution's research-producing divisions are covered by a published open access policy? (All, Some or None): **All**
 - o Is the open access policy mandatory or voluntary?: **Mandatory**
- Does the institution provide financial incentives to support faculty members with article processing and other open access publication charges?: **Yes**
- The University of California (UC) system is covered under two Open Access policies:
 - o (1) Open Access Policy for the Academic Senate of the University of California
 - Applies to all members of the UC academic senate
 - More information
 - o (2) Presidential Policy on Open Access
 - Applies to all UC employee authors who are not members of academic senate
 - More information
- Both policies ensure that all authors will submit their work to UC's institutional repository (eScholarship) by the date of their work's publication.
- The University of California Publication Management System has been created to facilitate authors' submission of their work to eScholarship through a convenient online system

Emory University ----- 2.00/2.00

- How many of the institution's research-producing divisions are covered by a published open access policy? (All, Some or None): **All**
 - o Is the open access policy mandatory or voluntary?: **Voluntary** (strictly opt-in)
- Does the institution provide financial incentives to support faculty members with article processing and other open access publication charges?: **Yes**
- Open access policy was adopted in 2011
 - o Information on Open Access at Emory University
- OpenEmory is the open access repository made available to all faculty members
 - o OpenEmory Repository
- The Emory Theses and Dissertation (ETD) Repository
 - Requires graduate students and undergraduate honors students to submit their theses and dissertations
 - Only for participating Emory schools that decide to utilize the service
 - Submissions are stored in the ETD repository
 - o <u>ETD Repository</u>

EN1: Student Educators Program

Points: 4

UW-Madison:	0.69
Peer Group:	3.18
Big 10:	3.20
UW System:	2.60
Overall:	2.26

Highest Scoring Universities from Peer Group:

- 11/21 peer universities scored 4.00/4.00
- 17/21 peer universities scored \geq 2.00/4.00
- UW-Madison scored **higher** than **0/21** universities from the peer group

Credit Description

This credit recognizes institutions with programs that promote peer-to-peer sustainability outreach where students serve as educators for other students

Criteria

- Institution coordinates a peer-to-peer sustainability outreach and education program
 - Institution appoints students to serve as educators (can be paid or volunteer) and provides formal training on best practices in peer outreach
 - o Institution provides financial resources or administrative coordination
- Focuses on programs for degree-seeking students in a for-credit program
- This credit does not include sustainability outreach campaigns, events, or student groups

Scoring

4 points:

- Maximum points are earned for having at least one peer-to-peer educator program that serves all students enrolled for credit
- Incremental points are available based on the percentage of students served by such programs

Factor	Multiply	Total number of students served by a peer-to-peer outreach and education program	Divide	Number of students enrolled for credit	Equals	Points earned
4	×		÷		Ш	Up to 4

Changes from $v.2.1 \rightarrow v.2.2$

Split into two parts:

- *Part One (2 points):* Percentage of students served by peer-to-peer sustainability educators program
 - o Maximum points are earned for having at least one peer-to-peer educator program that serves all students enrolled for credit
 - Incremental points are available based on the percentage of students served by such programs

Factor	Total number of students served by a peer-to-peer sustainability outreach and education program			Total number of students enrolled for credit		Points earned for Part 1
2	×		÷		=	Up to 2

- Part Two (2 points): Educator hours per student served
 - Measured by the ratio: (number of hours worked by educators) / (number of students served by the peer-to-peer educators program)
 - Maximum points are earned when educators work at least one hour annually for each student served by the program
 - Incremental points are available based on the number of hours worked per student served

Factor		Grand total number of hours worked annually by trained student sustainability educators		Total number of students served by a peer-to-peer sustainability outreach and education program		Points earned for Part 2
2	×		÷		=	Up to 2

University of Wisconsin-Madison ----- 0.69/4.00

- Percentage of students served by a peer-to-peer educator program: 17.17%
- UW-Madison Residential Area Councils
 - Acts as a centralized hall organization model for student residences
 - o Develops and leads a variety of programs for student residents which address many topics, one of which includes 'Service and Sustainability'

Stanford University ----- 4.00/4.00

Percentage of students served by a peer-to-peer educator program: 100%

• Dorm Waste Trainings

 Freshmen involved in the student organization Students for a Sustainable Stanford (SSS) host waste trainings during dorm meetings, where they take 10 minutes to lead the residents in an educational waste sorting activity ³¹

• Graduate Student Community Advisors Program

- All graduate students have peer community advisors; all of these advisors receive sustainability training as part of their general training program, with a focus on raising awareness for sustainability among their peers
 - They are provided materials to send out to their peers with sustainability tips
 - They are trained specifically on hosting green events

• Students for a Sustainable Stanford Class Offerings & Support

- Within Students for a Sustainable Stanford (SSS) is the Sustainability Education group, whose goal is to improve student awareness of and engagement with issues related to sustainability
- o Offers student-led course titled Environmental Justice in the Bay Area
 - Hands-on course that discusses the intersectionality of social justice and environmental issues through student-led talks and fieldtrips
- Offers guest lectures
- o Supports content development in other courses that include sustainability
- o These courses are available to all students

Northwestern University ----- 4.00/4.00

• Percentage of students served by a peer-to-peer educator program: 100%

• SustainNU Eco-Rep Program

- Provides a structure for students to engage with peers around sustainability issues and opportunities in the campus environment
- Eco-Reps interact with the student population by:
 - Putting up signs and educational materials in residence halls
 - Holding conversations with residents on a variety of topics to educate them about sustainability
 - During Green Cup (the month-long competition between residence halls to reduce energy and water use) Eco-Reps encourage participation and hold events

• Environmental Programs Student Advisory Board

- Made up of 4 students from the Environmental Science and Environmental Policy and Culture programs
- These students advise program directors on how to shape developments and organize events that are centered on sustainability
- Organizes career panels, presentations from environmental professionals, environmental mixers, and Earth Day events.

³¹ The SSS facilitators hold up a variety of items (like water bottles, toilet paper rolls, juice containers, pizza boxes, etc.) and ask the dorm to guess where each item should be sorted. After each answer, they explain whether the residents were right or not, and why the item goes where it does. This program serves all students living in on-campus undergraduate student residences.

Cornell University ----- 4.00/4.00

Percentage of students served by a peer-to-peer educator program: 100%

• ALS 2000: Leadership for Sustainability course

- o 3-credit course taught each semester that focuses on developing climate solutions for firstyear and upper-level residential communities
- O Course description: "This course develops leadership, project management, research, and behavior change skills needed to become effective leaders for sustainability and climate change solutions on campus and beyond. Students will acquire knowledge about the effects of energy use on climate change, and analyze which sustainable actions have the greatest impact on reducing energy use and greenhouse gas emissions"
- o Students learn how to design, coordinate, and implement behavior change programs focused on reducing building energy use on campus in collaboration with campus partners.
- o In Spring 2018, 19 students completed nine projects which impacted approximately 3000 students.



EN2: Student Orientation

Points: 2

UW-Madison:	0.00
Peer Group:	1.78
Big 10:	1.82
UW System:	1.54
Overall:	1.59

Highest Scoring Universities from Peer Group:

- 13/21 peer universities scored 2.00/2.00
- 20/21 peer universities scored \geq 1.20/2.00
- Lowest score in peer group: 0.80/2.00

Credit Description

This credit recognizes institutions that give incoming students an opportunity to participate in activities that highlight sustainability during orientation

Criteria

- Incoming students includes transfer and graduate students
- Sustainability is prominently included in activities and programming
- Sustainability activities are educational about the principles and practices of sustainability
- Sustainable event planning doesn't count unless they are highlighted and included in the educational offerings
 - Serving local food doesn't count unless there is information provided about sustainable food systems

Scoring

2 points:

- Maximum points are earned when 100% of incoming students are given the opportunity to participate in orientation activities that prominently include sustainability
- Incremental points are available based on percentage

Factor	Multiply	Percentage of entering students provided orientation activities and programming that include sustainability (0-100)	Equals	Points earned
.02	×		п	Up to 2

University of Colorado Boulder ----- 2.00/2.00

Percentage of new students that are provided an opportunity to participate in orientation activities and programming that prominently include sustainability: 100%

- Before arriving on campus, all incoming students receive "BoulderBound" information. One issue is solely about sustainability information
 - o https://www.colorado.edu/orientation/2017/08/03/sustainability
- During Welcome Week, students are introduced to sustainability through:
 - o **Taste of CU**: a zero waste picnic for all incoming students following convocation, using zero waste facilities and signage. Students have the opportunity to sign a pledge, choose a reusable item, decorate water bottles, and get more information
 - o CU Environmental Center: offers campus green tours of sustainability features
 - **Resident Advisors**: receive training on sustainability programs and share the information with residents during orientation and move-in
 - Move-in recycling program helps take care of 20 tons of cardboard and polystyrene recycling
 - During orientation sessions, there is a program dedicated specifically to on educating students about sustainability on campus
 - Session also covers what sustainability is and why it matters

Emory University ----- 2.00/2.00

Percentage of new students that are provided an opportunity to participate in orientation activities and programming that prominently include sustainability: 100%

- All incoming students receive either reusable water bottles, reusable bamboo utensil sets, or farmer's market tote bags, all of which include Emory's sustainability goals to encourage sustainable behaviors
- The Office of Sustainability:
 - Leads a campus sustainability tour
 - Gives sustainability training to all resident advisors, sophomore advisors, and orientation leaders
 - o Has a booth at orientation fairs, and holds a post-orientation student engagement expo
- Sustainability Showcase during orientation week gives a chance for representatives from sustainability-related organizations and departments to provide information to incoming students on how to get involved around campus

- Emory has been holding zero-waste orientations since 2009, where students volunteers are stationed in position to education students about how to properly dispose of waste
- All incoming students receive sustainability advice prior to move in through an electronic packet
 - o Information includes shopping tips, sustainable commute information, and a general introduction to sustainability at Emory

Stanford University ----- 2.00/2.00

Percentage of new students that are provided an opportunity to participate in orientation activities and programming that prominently include sustainability: 100%

- Before arriving to campus, all new students are introduced to sustainability on campus through a series of articles and digital resources contained in the New Student Orientation weekly e-newsletter
 - Resources include a Student Sustainable Living Guide and Sustainability Living Video
 - Provides an overview of sustainability programs and practical individual advice on how to be more sustainable on campus
 - Includes comments from institutional leadership about the importance of sustainability to the university
- Sustainability staff and student organizations have informational tables at new student orientations (both undergrad and grad)
- Green practices at events during new student orientation
 - Vegetarian/vegan meals
 - Compostable/reusable cups (no plastic water bottles)
 - o Orientation staff are trained to help incoming students sort waste during week

EN06: Assessing Sustainability Culture

Points: 1

UW-Madison:	0.00
Peer Group:	0.50
BIG 10	0.33
UW-System	0.19
Overall	0.23

Highest Scoring Universities from Peer Group:

•	University of Cincinnati:	1.00
•	University of Colorado Boulder:	1.00
•	The Ohio State University:	1.00

Credit Description

This credit recognizes institutions that are assessing the sustainability culture of the campus community. Such assessments help institutions evaluate the success of their sustainability outreach and education initiatives and develop insight into how these initiatives could be improved.

Criteria

Institution conducts an assessment of campus sustainability culture. The cultural assessment focuses on sustainability values, behaviors, and beliefs, and may also address awareness of campus sustainability initiatives.

<u>Scoring</u>

1 Point:

- Administered to the entire campus community directly or by a representative sample (0.5 points) OR Administered to a subset of the campus community or a sample that me not be representative of the entire community (0.25 points)
- Administered longitudinally to measure change over time (i.e., with one or more followup assessments administered to the same cohort or representative samples of the same population (x2)

Changes from $2.1 \rightarrow 2.2$

Participation by U.S. and Canadian institutions in the Sustainability Education Consortium (NSSE) qualifies as a cultural assessment whereas in v2.1, this did not count but could be included in the exemplary practice credit.

University of Cincinnati ------1.00/1.00

- The Office of Sustainability, working with Institutional Research, inventoried the use of such assessments at other US campuses and developed a survey for faculty, staff and students that incorporates culture as well as literacy. This is an online survey, administered in the Fall.
- The survey is conducted and will be analyzed through the Office of Sustainability with assistance from the Office of Institutional Research; the instrument delivering the survey will be Qualtrics.
- The Office of Sustainability will post and analyze the results as they change over time, but there are not yet multiple years of data we cannot speak to change over time.

University of Colorado Boulder-----1.00/1.00

- Survey was developed from examples from other schools, STARS criteria, and previous campus surveys. Housing also administers an annual residential experience survey to all oncampus residents.
- Fall 2017 assessment distributed to a representative sample of all undergrad and grad students (sample size 3500) and to a representative sample of faculty and staff (sample size 1000). Samples generated by the office of Institutional Research. Assessments administered by Qualtrics.
- Results
 - o 97% of students indicated that sustainability was either "Very" or "Somewhat" important to them now that they are CU Boulder students (6% increase)
 - o 92% of students said it was important to them that CU Boulder has a strong commitment to environmental sustainability
 - 48% of students report they are engaged in sustainability oriented events and programs on campus either "moderately" or "extremely"
 - o 40% of students report they chose CU in part because of its sustainability reputation (consistent)

The Ohio State University ------1.00/1.00

- The items used in the 2014 survey effort were developed through expert input, focus groups, and analysis of sustainability literature. The 2018 version of the survey updated these items.
- In 2018, 20,500 random undergraduate students (stratified by class year) were contacted via email, to which 3,293 responded.
- By comparing a sub-set of eight items used in both the 2014 survey and the 2018 pilot survey, it can be estimated that engagement of Undergraduate students in sustainable behaviors has increased. In 2014, self-reported engagement in these behaviors was 57.25% on average on a 100-point scale (of 'what percent of the time you engage in the behavior'). On the 2018 version of the survey, engagement in these same behaviors was 3.67 on average (SD = .50) using a 5-point ("never" to "always") engagement scale. While not perfect

comparisons due to scale changes, if the 100-point engagement scale were converted to a 5-point scale, the score from 2014 would be 2.86 on average; almost a full point lower than the 2018 average.

o In 2018, several other measures of sustainability culture and values were assessed, including the Sustainability Attitudes Scale (SAS), of which students had an average score of 5.90 (SD = .90) on a 1-7 "strongly disagree" to "strongly agree" scale. In other words, this indicates that the large majority of students agreed with statements such as "Biological diversity in itself is good."



EN7: Employee Educators ProgramPoints: 3

UW-Madison :	0.01
Peer Group:	1.66
Big 10:	1.48
UW System:	0.10
Overall:	0.84

Highest Scoring Universities from Peer Group:

•	Emory University:	3.00
•	University of Missouri:	3.00
•	Stanford University:	3.00
•	University of Virginia:	3.00
•	University of Washington, Seattle:	3.00
•	University of Michigan:	3.00
•	Northwestern University:	3.00
•	Iowa State University	3.00
•	University of Colorado Boulder:	2.75
•	University of California, Irvine:	1.99

6/21 peer universities scored <0.20/3.00

Credit Description

This credit recognizes institutions with programs in which staff and faculty (S&F) serve as educators to other S&F around sustainability initiatives and programs

Criteria

- Institution must oversee a peer-to-peer sustainability outreach and education program
- Program must meet the following:
 - o Employee sustainability educators are designated and receive formal training
 - Program is supported by institution either financially and/or with administrative coordination
 - o Employee sustainability educators represent diverse areas of campus
- Outreach and education efforts by sustainability staff or a sustainability office do not count
- A group of employees may be served (targeted) by a program even if not all employees actively participate
- Green office programs may count if they include formally designated and trained peer employee educators

Scoring

3 points:

- Maximum points are earned for having a peer-to-peer educator program that serves all employees (full- and part-time S&F)
- Incremental points are available based on the percentage of S&F served by such programs

→	Factor	Multiply	Number of employees served by a peer-to- peer outreach program	əpiviQ	Total number of employees	Equals	Points earned
	3	×		4		П	Up to 3

Changes from v.2.1 \rightarrow v.2.2

None!

UW-Madison ------0.01/3.00

Green Office Certification Program

- Campus offices of any size can become more sustainable workplaces through a three-step certification process that gives employees information and tools to learn about sustainability, understand their impacts, and create sustainable work environments
- Office leaders that participate are trained and tasked to educate all employees in their office on the program and activities.
 - Includes educating office employees on waste collection, energy, and water use best practices, completing energy audits, or setting up central storage of communal office supplies.

University of Virginia ------3.00/3.00

Green Workplace Program

- Engages employees and workplaces in actions that conserve energy, save money, and advance sustainability
- The program includes 60 actions workplaces can implement to be more sustainable
- Participants earn a certification level (bronze/silver/gold) based on the amount of points they earn from credits ranging between one and five points
- Green Workplace Teams get started with an information session run by the Green Workplace Program coordinator, who is a staff member from the Office of Sustainability. This program coordinator gives formal training to Green Teams, and serves as a consultant

Sustainability Partners

- Voluntary groups that meets every other month, providing members the opportunity to learn from local sustainability experts, share ideas for green workplaces program actions, receive updates and discuss current campus sustainability events, and be in a place where they can create a community with like-minded individuals
- Partners advocate and promote initiatives that reduce energy and water use, minimize waste, promote community, and enhance well-being

Emory University------3.00/3.00

Sustainability Representatives

- Present for all major campus buildings, nominated by dean / department supervisor
- Role is to:
 - o Be an ambassador for sustainability initiatives and encourage behavioral changes that increase sustainability
 - Serve as an interface between larger vision and building occupants, by impacting daily decisions regarding waste, energy, purchasing, transportation, printing, etc.
- Commitment is 2-5 hours per month to sustainability awareness-building activities, and one representative meeting per month

Sustainable Food Committee

- Develops recommendations for meeting food-related goals in the University's Sustainability Vision
- Developed steps to meet goal of sourcing 75% of ingredients in cafeterias and hospitals from local or sustainability grown sources

- Works with farmers and distributors to increase regional food supplies, develop farmers market on campus, develop guidelines for sustainable food procurement, and more
- Meets monthly

University of Michigan -----3.00/3.00

Sustainable Workplace Certification Program

- Volunteer program that encourages staff and faculty to contribute to making a more sustainable campus by increasing the sustainability practices in their individual area
- An office begins the process by submitting a self-assessment of the current office sustainability conditions; an OS representative will then meet with someone to discuss areas of improvement and provide information and technical assistance
- Offices often form "Green Teams"
- Open to all employees, with no set definition of what a "workplace" is

^{**}Many other universities implement some sort of a green office/workplace certification program

EN8: Employee Orientation

Points: 1

UW-Madison: 0.02

Peer Group: 0.90
Big 10: 0.86
UW System: 0.66
Overall: 0.74

Highest Scoring Universities from Peer Group:

• **18/21** peer universities scored **1.00/1.00**

Credit Description

This credit recognizes institutions that offer new employees materials that cover sustainability topics during orientation

Criteria

- New employees includes staff and faculty
- Sustainability can be covered either by:
 - o Discussing sustainability topics during new employee orientation
 - o Distributing guidance materials to new employees

Scoring

1 point:

- Maximum points are earned when 100% of new employees are introduced to campus sustainability topics through the criteria outlined above
- Incremental points are available based on percentage

Factor	Multiply	Percentage of new employees offered orientation and/or outreach and guidance materials that cover sustainability (0-100)	Equals	Points earned
0.01	×		"	Up to 1

Changes from $v.2.1 \rightarrow v.2.2$

None!

University of Wisconsin-Madison ----- 0.02/1.00

Percentage of new employees that are offered orientation and/or outreach and guidance materials that cover sustainability topics: 2.00%

Only University Housing employees attend an orientation that covers sustainability topics

Stanford University ----- 1.00/1.00

Percentage of new employees that are offered orientation and/or outreach and guidance materials that cover sustainability topics: 100%

- Stanford's Welcome Center offers a full-day orientation for onboarding new staff
- During orientation:
 - Sustainable Stanford is given time to introduce sustainability initiatives and encourage enrollment in the individual action network
 - o There is a presentation on transportation programs and encouraging sustainable transportation
- STARS page contains link to sustainability presentation

Cornell University ----- 1.00/1.00

Percentage of new employees that are offered orientation and/or outreach and guidance materials that cover sustainability topics: 100%

- The Cornell Onboarding Center provides all the services needed for new employees
- Sustainability is referenced in the staff and faculty resource documents for new hires
 - Resources for Staff Document
- Sustainability is incorporated into the <u>Wellbeing Model</u>, which compiles resources that help support the wellness of employees. 'Environmental' is identified as one of the seven dimensions of wellbeing

University of California, Irvine ----- 1.00/1.00

Percentage of new employees that are offered orientation and/or outreach and guidance materials that cover sustainability topics: 100%

- New employee orientation is done online
- Sustainability resources are highlighted through the online portal, and include information on sustainable campus dining and transportation, waste minimization and recycling, sustainable purchasing, and how to incorporate sustainable practices into the classroom, lab, and office
 - Link to "Sustainability Resources for Faculty and Staff"

EN9: Staff Professional Development

Points: 2

UW-Madison:	0.00
Peer Group:	1.21
Big 10:	1.27
UW System:	0.92
Overall:	1.05

Highest Scoring Universities from Peer Group:

•	Iowa State University:	2.00
•	University of Missouri:	2.00
•	Northwestern University:	2.00

- 4/21 peer universities scored 1.50/2.00
- 10/21 peer universities scored 1.25/2.00
- 1/21 peer universities scored 1.00/2.00
- 3/21 peer universities scored 0.00/2.00

Credit Description

This credit recognizes institutions that provide staff members the opportunity to participate in sustainability-focused professional development and training

Criteria

- <u>Professional Development and Training (PD&T)</u>: Defined as "any activity which develops an individual's skills, knowledge, expertise, and other characteristics" as an employee
 - o Includes formal coursework, participation in activities and professional organizations, collaborative development of new approaches, and independent study and research

Part One: Availability of sustainability PD&T

• Institution provides PD&T opportunities in sustainability to all staff at least once per year

Part Two: Participation in sustainability PD&T

- Institution's staff (full-time and part-time) participate in sustainability PD&T
- PD&T opportunities include:
 - o Integrating sustainability knowledge/skills into the workplace
 - Lifelong education in sustainability
 - o Sustainability accreditation and credential maintenance (ex: LEED)
- This credit does not apply to faculty members, only staff
- PD&T opportunities may be provided internally or externally, as long as they are specific to sustainability
 - o Internal training can either be by department or the sustainability office
 - o For external training to count, the institution must offer financial support

Scoring

Part One (1 point): Availability of sustainability PD&T

- Maximum points are earned when an institution provides sustainability PD&T opportunities to all staff members at least once per year
- Partial points are not available

Part Two (1 point): Participation in sustainability PD&T

- Maximum points are earned when at least 75% of staff (full-time and part-time) participate in sustainability PD&T at least once per year
- Partial points are available based on percentage

Estimated percentage of regular staff that participates annually in sustainability professional development and training	Points earned
1 – 24%	0.25
25 – 49%	0.5
50 – 74%	0.75
75% or more	1

Changes from $v.2.1 \rightarrow v.2.2$

Name of credit changed to 'Staff Professional Development and Training'

University of Wisconsin-Madison ----- 0.00/2.00

Does the institution make available PD&T opportunities in sustainability to all staff at least once per year?: **No**

Iowa State University ----- 2.00/2.00

75% or more of regular staff participate annually in sustainability PD&T

Procurement Process Certification Training:

- 8 hour course on the procurement process
- Open to any employee; required for high volume p-card users
- Includes a session on green procurement that covers:
 - o Environmentally preferable purchasing guidelines
 - o Reducing unnecessary waste
 - o Purchasing recycled content products
 - Ways to save energy and water through purchasing
 - o Minimizing pollution generation and toxin use by purchasing degradable products
 - Key terms in green procurement (Energy Star products, life cycle analysis, recyclable versus reusable, etc.)

University of Missouri ----- 2.00/2.00

75% or more of regular staff participate annually in sustainability PD&T

- Anti-discrimination training is required by all staff and faculty
 - Training classes, workshops, programs, and resources are offered to all employees by the Department of Human Resource Services
- Office of Sustainability staff attend Staff Council meetings once per semester to provide updates, training, and feedback

Cornell University ----- 1.50/2.00

25-49% of regular staff participate annually in sustainability PD&T

- Sustainability is incorporated into every staff member's job description through Cornell's Skills for Success. These skills are:
 - 1. Act and take initiative: adopt a culture of sustainability and efficiency
 - 2. People seek me out to find solutions and deliver results: assess environmental, economic, compliance and social impacts in decision-making
- Every semester, the Office of Sustainability offers two 3-hour sustainability sessions for a professional development series
 - o Covers the importance of sustainability and climate change at Cornell
 - Covers personal and professional decision-making skills, including the Quadruple Bottom Line, which is an institution-made sustainability framework for decision making
- The Office of Sustainability offers Sustainability Management Academy course and also hosts training sessions on community-based social marketing, sustainability initiatives, and sustainability framework for decision making
 - o Can be specified for a certain department
 - o Shortened, 1.5 hour course



EN12: Continuing Education

Points: 5

UW-Madison :	0.55
Peer Group:	3.37
Big 10:	3.58
UW System:	3.12
Overall:	2.17

Highest Scoring Universities from Peer Group:

•	University of Colorado Boulder:		5.00
•	Cornell University:	5.00	
•	University of Georgia:		5.00
•	Iowa State University:		5.00
•	University of Missouri:		5.00
•	Stanford University:		5.00
•	University of Illinois, Urbana-Champaign:	5.00	
•	University of Michigan:		5.00
•	University of California, Irvine:		4.31
•	University of North Carolina at Chapel Hill:	3.62	

• UW-Madison scored **higher** than 2/21 universities from the peer group

Credit Description

This credit recognizes institutions that provide continuing education courses and programs that are focused on sustainability or include sustainability. These courses build knowledge of sustainability, and/or offer professional recognition for sustainability training needed to perform green jobs

Criteria

- Continuing education courses are non-credit and open to members from the community. Their purpose is to build knowledge about specific subjects
 - o In some cases, points are earned that help attain certifications to meet personal/professional requirements

Part One: Continuing Education Courses in Sustainability

- Institution conducts an inventory of continuing education courses to identify those that address sustainability
- Continuing education that address sustainability may either be:
 - o Identified as sustainability course offerings (see definition below)
 - o Formally designated as sustainability course offerings

Part Two: Sustainability-Focused Certificate Program

 Institution has at least one sustainability-focused certificate program through the continuing education department

- <u>Sustainability Course Offerings</u>: Includes (1) **sustainability courses** (2) **courses that include sustainability**
 - 1. <u>Sustainability Courses</u>: Courses which have sustainability as a primary and explicit focus or solve/understand at least one major sustainability challenge. This includes:
 - o Foundational courses with a primary and explicit focus on sustainability
 - Ex: Introduction to Sustainability, Sustainable Development
 - o Courses with a primary and explicit focus on applying sustainability to a specific field
 - Ex: Sustainable Business, Architecture for Sustainability
 - Courses with a primary focus on providing skills/knowledge directly related to solving/understanding a major sustainability challenge. Such courses may not cover sustainability as a concept, but address more than one of the three dimensions of sustainability (social wellbeing, economic prosperity, and environmental health)
 - Ex: Climate Change Science. Renewable Energy Policy, Green Chemistry
 - 2. <u>Courses That Include Sustainability</u>: Courses that focus on non-sustainability topics, but include a unit/module on sustainability or a sustainability challenge, include sustainability-focused activities, or integrate sustainability throughout the class
 - o The inclusion of sustainability should be documented in course descriptions or syllabi

Scoring

Part One (3 points): Percentage of continuing education courses that address sustainability

- Maximum points are earned when 10% or more of continuing education courses address sustainability
- Incremental points are available based on percentage

Factor	Multiply	Number of continuing education courses that address sustainability	Divide	Total number of continuing education courses offered	Equals	Points earned
30	×		÷		=	Up to 3

Part Two (2 points): Institution has at least one sustainability-focused certificate program

- Maximum points are earned if institution has such program
- Incremental points not available

Changes from $v.2.1 \rightarrow v.2.2$

None!

University of Wisconsin-Madison ----- 0.55/5.00

Percentage of continuing education courses that are sustainability offerings: 1.83% (15/821)

Does the institution have at least one sustainability-focused certificate program through its continuing education department?: **No**

University of California, Irvine ----- 4.31/5.00

Percentage of continuing education courses that are sustainability offerings: 7.71% (32/415)

Does the institution have at least one sustainability-focused certificate program through its continuing education department?: **Yes**

Sustainability-focused Certificate Programs:

Environmental Management

- Prepares professionals for the expanding regulatory framework and increasing need for sustainable and green initiatives in the rapidly changing environmental profession
- Brochure on the Environmental Management Certificate

Facilities Management

- Furthers the understanding of coordinating the physical work environment with the people and work of an organization
- Focuses on the design and management of facilities
- Brochure on the Facilities Management Certificate

Water-Energy Nexus

- Helps to understand the critical interaction between water and energy. Topics include biological
 and physical-chemical treatment processes, carbon and energy footprint analysis, and sustainable
 energy systems
- Webpage for the Water-Nexus Certificate

University of Colorado Boulder ----- 5.00/5.00

Percentage of continuing education courses that are sustainability offerings: 12.90% (8/62)

Does the institution have at least one sustainability-focused certificate program through its continuing education department?: **Yes**

Sustainability-focused Certificate Programs:

Certificate in Corporate Social Responsibility

- For professionals who seek to further the practice of socially responsible business. These skills help companies and communities
- This is important as businesses are moving towards conscious capitalism (balancing profit and environmental/social impact) while facing increased expectations to be more socially responsible
- Webpage for the Certificate in Corporate Social Responsibility

Cornell University ----- 5.00/5.00

Percentage of continuing education courses that are sustainability offerings: 40.00% (23,436/58,591)

Does the institution have at least one sustainability-focused certificate program through its continuing education department?: **Yes**

Sustainability-focused Certificate Programs:

Cornell Cooperative Extension (CCE)

- Provides educational programs and university resources to help solve real-life problems that helps families, businesses, and communities
- Available to citizens across New York state
- Example programs include:
 - o Family Nutrition and Budget Balancing
 - o Certificate in Plant-Based Nutrition
 - o Climate Smart Farming
 - Master Composter
 - o Master Gardener
 - o Preventing Childhood Obesity: An Ecological Approach
 - o Climate Change Science, Communication, and Action Online Course
- Webpage for CCE



OP3: Building Operations and Maintenance

Points: 5

UW-Madison:	0.01
Peer Group:	1.46
Big 10:	1.26
UW System:	1.42
Overall:	0.95

Highest Scoring Universities from Peer Group:

2.31
2.23
2.06
2.02
2.02
2.00
2.00
1.96

• UW-Madison scored **higher** than 1/21 universities from the peer group

Description of Credit

This credit recognizes institutions whose buildings are operated and maintained in ways that serve the health of building occupants and the environment

 A sustainable operations and maintenance framework assists with energy/water conservation, waste/water reduction, improving indoor environmental quality, minimizing impacts on surrounding environment, sourcing environmentally preferable materials, and providing healthy and productive spaces

Criteria

- An institution has **two options** for meeting the criteria:
 - 1. Buildings are **certified** under a **green building rating system** focused on existing buildings (ex: LEED: Building Operations + Maintenance (O+M))
 - 2. Buildings are **operated and maintained** under **published guidelines and policies** that include at least one of the following:

a. Indoor air quality management (policy or protocol)
b. Green cleaning policy (program or contract)
c. Energy management or benchmarking (program)

d. Water management or benchmarking (program)

- (programmy
- Sustainable operation and maintenance (O&M) programs/policies and rating systems can **either be multi-attribute or singe-attribute**
 - Multi-attribute addresses multiple aspects of sustainability (examples listed above) while single-attribute focuses predominantly on one

Scoring

5 points: Percentage of eligible building space that is either certified under a green building rating system or maintained in accordance with a sustainable O&M policy

- Maximum points are earned when all of an institution's eligible building space is certified at the highest achievable level (LEED O+M Platinum or highest level of another GBC rating system)
- Incremental points are available based on:
 - The percentage of building space that is either certified under a rating system or maintained with an O&M policy
 - o The level of certification under a rating system
 - The amount of aspects of sustainability contained in a O&M policy (multi-attribute or single-attribute)
- Building space certified under an Established <u>Green Building Council (GBC)</u> rating system is weighted more heavily than others
- Floor area operated and maintained under multiple O&M policies/programs and/or rating systems is not double-counted

For **certified** spaces:

Operations and maintenance level	Factor	Multiply	Floor area of building space certified at each level	Divide	Total floor area of building space	Equals	Points earned
Certified LEED O+M Platinum or at the highest achievable level under another GBC rating system	5						
Certified LEED O+M Gold or at the 2nd highest level under another 4- or 5- tier GBC rating system	4						
Certified at mid-level under a 3- or 5- tier GBC rating system (e.g., BREEAM- In Use, CASBEE for Existing Buildings, DGNB, Green Star Performance)	3.5	×		÷		=	
Certified LEED O+M Silver or at a step above minimum level under another 4-or 5-tier GBC rating system	3						
LEED O+M Certified or certified at minimum level under another GBC rating system	2.5						
Certified at any level under a non- GBC rating system (e.g., BOMA BESt, Green Globes CIEB)	2.5						
Total points earned for certified space	e →						Up to 5

For **uncertified** spaces maintained under a sustainable O&M policy:

Maintained under a(n):	Factor		Percentage of uncertified space maintained under each policy or program (0- 100)		Floor area of uncertified space		Total floor area of building space		Points earned
Indoor air quality (IAQ) management policy or protocol	0.005								
Green cleaning policy, program or contract	0.005	×		×		÷		=	
Energy management or benchmarking program	0.005	Î		Ŷ		Ŧ		_	
Water management or benchmarking program	0.005								
Total points earned fo	or uncerti	fied	space →						Up to 2

Changes from $v2.1 \rightarrow v2.2$

- Changing from OP3 → OP4
- Scoring for **uncertified** spaces maintained under a sustainable O&M policy:
 - o Split into two categories (multi-attribute and single-attribute) rather than incrementally scoring each attribute

Operations and maintenance (O+M) level	Factor	Floor area operated and maintained at each level	Total floor area of building space	Points earned
Operated and maintained in accordance with a multi-attribute sustainable management policy/program, but not certified	2			
Operated and maintained in accordance with a single-attribute sustainable management policy/program, but not certified	1			

University of Wisconsin-Madison ----- 0.01/5.00

- Total floor area of building space: 24,271,554 sq. ft.
- 2.40% of uncertified building space is **operated and maintained** in accordance with a **published** green cleaning policy
 - o The Union Directorate has a Green Cleaning Policy for Leopold Residence Hall

University of Georgia ----- 2.31/4.00

- Total floor area of building space: 17,661,340 sq. ft.
- **62.14%** of building space is **certified under** the **CIMS** (Cleaning Industry Management Standard) **Green Building** rating system.
 - o CIMS Green Building
 - \circ (2.50) * (.6214) = 1.55 points earned
- 100% of uncertified building space is operated and maintained in accordance with a multiattribute sustainable management policy
 - o Addresses indoor air quality, green cleaning, energy management, water management
 - \circ (2.00) * (1 .6214) = 0.76 points earned

University of California, Irvine ----- 2.06/4.00

- Total floor area of building space: 11,064,125 sq. ft.
- 0.67% of building space is certified at the 2nd highest level
 - \circ (4.00) * (.0067) = 0.03 points earned
- 3.09% of building space is certified at a step above minimum level
 - \circ (3.00) * (.0309) = 0.09 points earned
- 2.16% of building space is certified at the minimum level
 - \circ (2.50) * (.0216) = 0.05 points earned
- 100% of uncertified building space is **operated and maintained** in accordance with a **multi-** attribute sustainable management policy
 - o Addresses indoor air quality, green cleaning, energy management, water management
 - \circ (2.00) * (1 .0067 .0309 .0216) = 1.88 points earned

OP4: Building Design and Construction

Points: 3

UW-Madison:	0.63
Peer Group:	2.11
Big 10:	1.64
UW System:	1.40
Overall:	1 49

Highest Scoring Universities from Peer Group:

•	University of California, Irvine	3.00
•	Cornell University	2.77
•	University of Illinois, Urbana-Champaign	2.69
•	University of California, Berkeley	2.53
•	University of Colorado Boulder	2.48
•	University of Missouri	2.43
•	University of California – San Diego	2.33
•	University of Texas at Austin	2.31

- UW-Madison scored higher than 0/21 universities from the peer group
 - o The three lowest scores from the peer group: 1.17, 1.50, 1.70

Description of Credit

This credit recognizes institutions that incorporate environmental features into the design and construction of **new** building projects or major renovations. This is done through green construction and renovation programs, and third party certifications for newly constructed buildings

Criteria

- This credit only considers buildings that were constructed or underwent major renovations in the previous five years
- Building space can be:
 - o Certified under a green building rating system
 - Certified under the <u>Living Building Challenge</u>
 - O Designed and built under a published green building code/policy that covers at least one of:
 - Building location and orientation, and how the surrounding area is impacted)
 - Enhanced indoor environmental quality
 - Materials and resources used for construction
 - Water and energy efficiency and building-level metering
 - Water and energy building-level metering
- Green building codes can either be multi-attribute or single-attribute; multi-attribute focuses on one
 aspect of sustainability (examples listed in bullets in above) while single-attribute primarily focuses
 on just one aspect

Scoring

3 points: Percentage of eligible building space (completed during previous five years) that is either certified under a green building rating system, certified by the Living Building Challenge, or constructed/designed in accordance with a green building policy

- Maximum points are earned when all of an institution's eligible building space is certified at the highest achievable level (LEED BD+C Platinum or highest level of another GBC rating system), or certified under the Living Building Challenge
- Incremental points are available based on:
 - The percentage of building space that is either certified under a rating system or maintained with a green building policy
 - o The level of certification under a rating system
 - The amount of aspects of sustainability contained in a green building policy (multi-attribute or single-attribute)
- Building space certified under an Established <u>Green Building Council (GBC)</u> rating system is weighted more heavily than others
- Floor area operated and maintained under multiple O&M policies/programs and/or rating systems is not double-counted

				-			
Design and construction level	Factor	Multiply	Floor area of building space certified at each level	Divide	Total floor area of newly constructed and renovated building space	Equals	Points earned
Certified Living under the Living Building Challenge	3.5						
Certified LEED BD+C Platinum or at the highest achievable level under another GBC rating system	3						
Certified LEED BD+C Gold or at the 2nd highest level under another 4- or 5-tier GBC rating system	2.5						
Certified at mid-level under a 3- or 5- tier GBC rating system (e.g., BREEAM, CASBEE, DGNB, Green Star)	2	×		÷		= -	
Certified LEED BD+C Silver or at a step above minimum level under another 4- or 5-tier GBC rating system	1.875	Ŷ		T			
LEED BD+C Certified or certified at minimum level under another GBC rating system	1.5						
Certified at any level under a non- GBC rating system (e.g., Green Globes NC, Certified Passive House)	1.5						
Not certified, but constructed according to green building guidelines or policies	0.18 - 1.25*						
Total points earned →							Up to 3

Institution's published green building design and construction guidelines and policies cover:	Factor	Factor to be applied
Impacts on the surrounding site	0.18	
Energy consumption	0.18	
Building-level energy metering	0.18	
Usage of environmentally preferable materials	0.18	
Indoor environmental quality	0.18	
Water consumption	0.18	
Building-level water metering	0.18	
Total factor to be applied →		Up to 1.25

Changes from $v2.1 \rightarrow v2.2$

• Changing from OP4 → OP3

• <u>Scoring</u>:

- Scoring for uncertified spaces built in accordance with a green building policy: Split into two categories (multi-attribute and single-attribute) rather than incrementally scoring each attribute
- o Living Building Challenge worth a factor of 3.0 rather than 3.5
- Other scoring changes per level of certification

Design and construction level	Factor		Floor area certified or designed and built at each level		Total floor area of new or renovated building space		Points earned
Certified at the highest achievable level under a multi-attribute GBC rating system (e.g., LEED BD+C Platinum or Certified Living Building)	3.0						
Certified or at the 2nd highest level under a 4- or 5-tier, multi-attribute GBC rating system (e.g., LEED BD+C Gold)	2.5						
Certified at mid-level under a 3- or 5-tier, multi-attribute GBC rating system (e.g., BREEAM Very Good)	2.25						
Certified at a step above minimum level under a 4- or 5-tier, multi-attribute GBC rating system (e.g., LEED BD+C Silver)	2.0	×		÷		=	

Total points earned →				Up to 3
Designed and built in accordance with a single-attribute green building code, policy/guideline, or rating system, but not certified	0.625			
Designed and built in accordance with a multi-attribute green building code, policy/guideline, or rating system, but not certified	1.25			
Certified/verified at any level under a a multi-attribute, non-GBC rating system, a green building code, or a single-attribute rating system	1.5			
Certified at minimum level under a multi-attribute GBC rating system (e.g., LEED BD+C Certified)	1.5			

University of Wisconsin-Madison ----- 0.63/3.00

- Total floor area of newly constructed/renovated building space: 2,275,652 sq. ft.
- \bullet 14.73% of building space is certified at the 2^{nd} highest level
 - \circ (2.5) * (.1473) = 0.37 points earned
- 13.73% of building space is certified at a step above the minimum level
 - \circ (1.875) * (.1373) = 0.26 points earned

University of California, Irvine ----- 3.00/3.00

- Total floor area of newly constructed/renovated building space: 904,168 sq. ft.
- 100% of building space is certified at the highest achievable level
 - \circ (3.0) * (1.0) = 3.00 points earned
- Irvine's Sustainable Practice Policy

Cornell University ----- 2.77/3.00

- Total floor area of newly constructed/renovated building space: 1,011,145 sq. ft.
- 61.81% of building space is certified at the highest achievable level
 - \circ (3.0) * (.6181) = 1.85 points earned
- 34.18% of building space is certified at the 2nd highest level

- \circ (2.5) * (.3418) = 0.85 points earned
- 4.01% of building space is certified at the minimum level
 - \circ (1.5) * (.0401) = 0.06 points earned
- Green building guidelines and policies cover:
 - Energy consumption, building-level energy metering, use of environmentally preferable materials, and indoor environmental quality
- Cornell Design Standards and Details
- Cornell Green Buildings



University of Colorado Boulder ----- 2.48/3.00

- Total floor area of newly constructed/renovated building space: 1,664,292 sq. ft.
- 59.44% of building space is certified at the highest achievable level
 - \circ (3.0) * (.5944) = 1.78 points earned
- 18.31% of building space is **certified** at the 2nd **highest level**
 - \circ (2.5) * (.1831) = 0.46 points earned
- 22.25% of uncertified building space was **designed/constructed** in accordance with published **multi- attribute green building policy**
 - \circ (1.25) * (.2225) = 0.28 points earned
- Green building guidelines and policies cover:
 - Energy consumption, building-level energy metering, use of environmentally preferable materials, indoor environmental quality, water consumption, and building-level water metering



OP05: Building Energy Consumption

Points: 6

UW-Madison:	3.51
Peer Group:	3.26
BIG 10	3.07
UW-System	3.22
Overall	3.11

Highest Scoring Universities from Peer Group:

•	Stanford University:	5.14
•	University of California, Irvine:	4.40
•	University of Colorado Boulder:	4.17
•	UW-Green Bay*:	4.45

Description of Credit

This credit recognizes institutions that have reduced their building energy usage.

Criteria

- Institution has reduced its total building energy consumption per gross square foot/meter of floor area compared to a baseline.
- Institution's annual building energy consumption is less than the minimum performance threshold of 65 Btu per gross square foot per Fahrenheit degree day.

Scoring

- Institutions earn the maximum of 3 points available for Part 1 by reducing building energy consumption per gross square foot by 50 percent compared to a baseline. Partial points are awarded based on the reduction achieved.
- An institution earns the maximum of 3 points available for Part 2 when its annual building energy consumption is 90 percent or more below the minimum performance threshold of 65 Btu per gross square foot per Fahrenheit degree day.

Changes from $2.1 \rightarrow 2.2$

- Greater emphasis on building efficiency rather than energy reduction
- Institution is now rated on reducing its total source energy consumption per gross square meter or foot of floor area compared to a baseline as opposed to just reducing its total building energy consumption. This accounts for any losses in energy delivery.
- The U.S. EPA's Energy Factor Portfolio Averages have changed from 2.1 to 2.2

University of Wisconsin-Madison------3.51/6.00

- Percentage reduction in total building energy consumption per unit of floor area from baseline: 19%
- Building energy consumption (site energy) per unit of EUI-adjusted floor area per degree day, performance year: 20.87 Btu/ GSF/ Degree-Day (F)

Stanford University----- 5.14/6.00

- Percentage reduction in total building energy consumption per unit of floor area from baseline: 51.48%
- Building energy consumption (site energy) per unit of EUI-adjusted floor area per degree day, performance year: 23.20 btu/ GSF/ Degree-Day (F)
- Stanford Energy Systems Innovations (SESI) Project
 - Stanford has replaced its natural gas-fired cogen plant for a central energy facility (CEF). The cogen plant was responsible for 90% of Stanford's GHG emissions. A key feature of the CEF is an innovative heat recovery system that takes advantage of Stanford's overlap in heating and cooling needs. In addition to the CEF, the SESI project converted the heat supply of all buildings from steam to hot water. The efficiencies gained from the new CEF and hot water conversion, along with Stanford's commitment to procure much of its electricity from solar, reduces the university's overall GHG emissions by 68% from peak levels.

The Stanford campus has a 70% real-time overlap of heating and cooling demands. This presents the opportunity for heat recovery—using waste heat collected by the chilled water system to meet the university's concurrent heating need. Heat recovery chillers move waste heat collected from the chilled water loop to a new hot water loop that distributes heat to the buildings. The heat recovery system meets 88% of the heating load on campus with waste heat.

The Central Energy Plant Optimization Model (CEPOM) is a patented technology developed by Stanford that creates a forward-looking hourly plan for optimal operation of the CEF. The energy modeling and dispatch system uses over 1220 variables including building occupancy, ambient conditions, time of year, projected energy prices, weather forecast, current system conditions, etc. to develop 15-minute dispatches that show the optimal way to run the plant.

University of California, Irvine------4.40/6.00

- Percentage reduction in total building energy consumption per unit of floor area from baseline: 49.60%
- Building energy consumption (site energy) per unit of EUI-adjusted floor area per degree day, performance year: 37.31 Btu/ GSF/ Degree-Day (F)
- The majority of campus buildings are designed to take advantage of the Southern California climate. The walls of the newest buildings are 12+ inches thick concrete with no interior finish. The unfinished concrete walls are designed to absorb heat during the day and radiate it to the

space at night, and then at night absorb the cool night air and radiate it to the space during the day. Passive solar heating and cooling dramatically decreases the need for mechanical heating and cooling in our buildings.

• Since mid-2007, the campus has operated a combustion turbine generating plant at its award-winning central heating and cooling plant, which provides greater than 95 percent of the heating and cooling to the core campus facilities. The cogeneration facility uses a Solar Turbines Titan combustion turbine with an available steam turbine for additional energy recovery. The generating plant provides 81.8% of the electricity used by the campus and the heat recovery steam generator displaces more than 485,000 MMBtu of natural gas that would otherwise have been burned in conventional boilers.

University of Colorado, Boulder-----4.17/6.00

- Percentage reduction in total building energy consumption per unit of floor area from baseline: 22.13%
- Building energy consumption (site energy) per unit of EUI-adjusted floor area per degree day, performance year: 9.67 Btu/ GSF/ Degree-Day (F)
- UCB's Building Automation System (BAS) closely matches buildings' operational schedule with HVAC operation, activating temperature setbacks after hours. Some buildings even go beyond temperature setbacks to completely turn off chiller during unoccupied hours.
- Daylighting and passive solar heating are design elements employed in appropriate facilities.
- The UCB campus benefits from an on-site natural gas fired cogeneration of electricity, steam, and chilled water. Currently 100% of the steam and chilled water generated on campus is by Cogen.

UW-Green Bay------4.45/6.00

- Percentage reduction in total building energy consumption per unit of floor area from baseline: 25.81%
- Building energy consumption (site energy) per unit of EUI-adjusted floor area per degree day, performance year: 8.49 Btu/ GSF/ Degree-Day (F)
- The energy management system at the campus heating/cooling plant directs temperature regulation from the distribution point. Heating/cooling set points are based on occupancy hours.



OP6: Clean and Renewable Energy

Points: 4

UW-Madison: 0.06

Peer Group: 0.38
Big 10: 0.23
UW System: 0.47
Overall: 0.39

Highest Scoring Universities from Peer Group:

•	University of Missouri:		2.44
•	Stanford University:		2.23
•	University of Utah:	1.32	
•	Cornell University:	0.70	
•	Northwestern University:		0.59
•	University of California, San Diego:		0.21
•	University of California, Irvine:		0.09

• UW-Madison scored **higher** than **11/21** universities from the peer group

Credit Description

This credit recognizes institutions that support the development and use of energy from clean and renewable sources

Criteria

An institution has four options for supporting the development and use of clean and renewable energy sources:

- 1. Generating electricity from clean and renewable sources on campus
 - a. Institution must retain the rights of the renewable energy attributes
 - b. Selling Renewable Energy Credits for generated renewable energy doesn't count
 - c. The on-site renewable energy generating devices may be owned/maintained by a third party as long as the institution has contractual rights
- 2. Using clean and renewable sources on-site to generate energy other than electricity
 - a. Ex: Using biomass for heating
- 3. Assisting in the development of off-site clean and renewable sources
 - a. Institution must retain the rights of the renewable energy attributes
 - b. Ex: Off-campus wind farm that supplies electricity to the institution
- 4. Purchasing Renewable Energy Certificates (RECs) (or similar renewable energy products), or purchasing renewable electricity through the utility-provided green power purchasing options
- Neither of the following count for this credit:
 - o The electric grid mix for the region in which the institution is located
 - The electric grid mix reported by the electric utility that serves the institutions
- Solar, geothermal, hydroelectric, wind, and biofuel all count as renewable energy

Scoring

4 points:

- Maximum points are earned by generating or purchasing renewable energy that is equivalent to 100% of total campus energy consumption
- Incremental points are available based upon the percentage of generated/purchased renewable energy compared to the total campus energy consumption

Clean and renewable energy option (see Criteria)	Factor	Multiply	Energy generated or purchased that meets criteria (MMBtu)	Divide	Total energy consumption (MMBtu)	Equals	Points earned										
Option 1																	
Option 2	4	,		÷		=											
Option 3	4	×	Î	Î		^				^						-	
Option 4																	
Total points earned →							Up to 4										

Changes from v.2.1 \rightarrow v.2.2

Criteria:

The options for supporting the development and use of clean and renewable energy sources are expanded upon and split into categories:

Clean and Renewable Energy

- 1. Purchasing/importing electricity from certified clean and renewable sources
 - a. Includes utility-provided green power purchasing options, power purchase agreements, and equivalent products that bundle electricity with the right to claim its renewable energy attributes
- 2. Generating electricity from clean and renewable sources on-site
 - a. The on-site renewable energy generating devices may be owned/maintained by a third party as long as the institution has contractual rights

Clean and Renewable Thermal Energy

- 3. Using clean and renewable stationary fuels on-site to generate thermal energy
- 4. Purchasing or importing steam, hot water, and/or chilled water from certified clean and renewable sources

Unbundled Renewable Energy Products

- 5. Purchasing RECs, Guarantees of Origin (GOs), or equivalent unbundled renewable energy products certified by a third party
- Unbundled RECs are the new standard

Scoring: No changes in scoring except including the addition of another energy option

Clean and renewable energy option	Factor		Energy products that meet criteria		Total energy consumption		Points earned
Imported green power							
2. On-site renewables							
Clean and renewable fuels used to generate thermal energy	4	×		÷		=	
4. Imported thermal energy from clean and renewable sources							
5. Purchased RECs/GOs/I-RECs							
Total points earned →							Up to 4

University of Wisconsin-Madison ----- 0.06/4.00

Percentage of total energy consumption from clean and renewable sources: 1.61%

• Total energy consumption: 4,719,280 MMBtu

Percentage of total energy consumption from:

- Renewable electricity generated on-site: 0.002%
- Non-electric renewable energy generated on-site: 0%
- Renewable energy generated by off-site projects that institution catalyzed: 0%
- Third party certified renewable energy products: 1.61%

University of Missouri ----- 2.44/4.00

Percentage of total energy consumption from clean and renewable sources: 60.98%

• Total energy consumption: 2,832,790 MMBtu

Percentage of total energy consumption from:

- Renewable electricity generated on-site: 35.63%
- Non-electric renewable energy generated on-site: 22.20%
- Renewable energy generated by off-site projects that institution catalyzed: 3.15%
- Third party certified renewable energy products: 0%

Electricity use by source:

Biomass: 25%Coal: 16.40%

• Natural Gas: 41.30%

Wind: 12.40%Other: 5.20%

Non-electric renewable energy sources generated on-site:

• Biomass Fuel Boiler – A solar thermal hot water system that collects thermal energy from the sun to heat makeup water for the plant's boilers

Stanford University ----- 2.23/4.00

Percentage of total energy consumption from clean and renewable sources: 55.74%

• Total energy consumption: 1,112,792 MMBtu

Percentage of total energy consumption from:

- Renewable electricity generated on-site: 2.06%
- Non-electric renewable energy generated on-site: 0%
- Renewable energy generated by off-site projects that institution catalyzed: 46.82%
- Third party certified renewable energy products: 6.84%

Renewable energy sources generated by off-site projects that institution catalyzed:

- Stanford has a power purchase agreement to use all electricity and bundled RECs generated from a 67MW solar station
 - o In 2016, Stanford agreed to purchase all generated electricity and RECs for 25 years
- In order to achieve the goal of 80% carbon neutrality by 2025, Stanford announced its plans to construct a 88MW solar generating plant
 - o This will let Stanford generate 100% of their electricity from renewable sources
 - Coming in 2021, allowing Stanford to achieve 80% carbon neutrality four years ahead of schedule
 - o Official Announcement

Renewable electricity generated on-site:

• 32 total sites have rooftop panels, accounting for 2.06% of total electricity consumption

University of Wisconsin-Stevens Point ----- 2.01/4.00

Percentage of total energy consumption from clean and renewable sources: 50.34%

• Total energy consumption: 364,859 MMBtu

Percentage of total energy consumption from:

- Renewable electricity generated on-site: 0%
- Non-electric renewable energy generated on-site: **0%**
- Renewable energy generated by off-site projects that institution catalyzed: 0%
- Third party certified renewable energy products: 50.34%

Third party certified renewable energy products:

• RECs are 100% wind power



OP07: Food and Beverage Purchasing

Points: 6

UW-Madison:	0.40
Peer Group:	0.62
BIG 10	0.21
UW-System	0.41
Overall	0.61

Highest Scoring Universities from Peer Group:

University of Washington Seattle: 2.89
University of California Berkeley: 2.15

• Stanford University: 1.67

• 16/21 Universities: < 1.00 and 10/21 Universities: 0.00

Description of Credit

This credit recognizes institutions that are supporting sustainable food systems through their food and beverage purchases.

Criteria

Institution and/or its primary dining services contractor conducts an inventory to identify food and beverage purchases that have the following attributes:

- 1. **Third Party Verified.** The product is sustainably and/or ethically produced as determined by one or more recognized food and beverage sustainability standards.
- 2. **Local & Community Based.** The product does not qualify as Third Party Verified, but meets the criteria of the <u>Real Food Standards</u>³² for Local & Community Based.

Scoring

- Institutions earn the maximum of 4 points for Part 1 of this credit when 75 percent of total food and beverage purchases qualify as Third Party Verified or Local & Community-Based. Incremental points are available.
- Institutions earn the maximum of 2 points available for Part 2 by purchasing no conventional animal products (non third-party certified meat, poultry, fish/seafood, eggs, and dairy products) Incremental points are available for institutions for which conventional animal products comprise less than 30 percent of food and beverage expenditures comprised of conventional animal products.

Changes from $2.1 \rightarrow 2.2$

- Credit rationale has shifted to plant-based foods as opposed to reducing industrially produced animal products.
- Third Party Verified and Local & Community Based foods are now grouped together while

³² https://calculator.realfoodchallenge.org/help/resources

plant based foods are a new, separately scored entity.

- There is only one part of scoring now
 - 6 points available when the weighted cost of products that are sustainably/ethically produced and/or plant-based is equivalent to 100 percent or more of total food and beverage expenditures.
 - A purchase that is both sustainably/ethically produced and plant-based is counted in both categories. This means that the maximum points available may be earned in a variety of ways, for example when:
 - 50 percent of purchases are sustainably/ethically produced and 100 percent are plant-based,

- Percentage of food and beverage products that are third party verified or Local & Community-Based: 7.63%
- Percentage of total food and beverage products that do NOT qualify in either the Third Party Verified or Local & Community-Based category: 34.36%
- University Housing, Wisconsin Union Directorate, and Athletics often work with suppliers to
 identify sustainable options for produce and products consumed on campus. Where feasible,
 local food sources are utilized and all meals include vegetarian options to encourage healthy,
 low carbon food choices.

University of Washington Seattle----- 2.89/6.00

- Percentage of food and beverage products that are third party verified or Local & Community-Based: 31.50%
- Percentage of food and beverage products that do NOT qualify in either the Third Party Verified or Local & Community-Based category: 11.64%
- Over 30% of food and beverage purchases come from within 250 miles of campus.
- Washington has purchases produce grown on campus by the UW Farm for use in campus dining locations. There is continuous feedback to the farm on the types of produce the campus community, including chefs, would like to see for the upcoming years' harvest so that the farm can better plan their harvest mix.
- Washington works with Food Lifeline, a nonprofit organization dedicated to ending hunger in Western Washington, to pick up food items to be used in the local community to feed the hungry.
- Washington has a strong Supplier Diversity and Business Diversity Program (BDP) effort in place focused on both federal and state-level spending. Buying from certified, local women, minority-, and veteran owned business is a key goal of these programs.

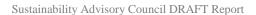
University of California, Berkeley-----2.15/6.00

- Percentage of food and beverage products that are third party verified or Local & Community-Based: 21.45%
- Percentage of total food and beverage products that do NOT qualify in either the Third Party Verified or Local & Community-Based category: 14.77%
- In addition to focusing on plant-forward cooking, Berkeley prioritizes using ingredients that are locally grown, humanely treated and environmentally and socially responsible. By reducing the portion of animal products, Berkeley has been able to source more humane certified animal products. The majority of the chicken, pork, beef, milk, turkey and eggs are certified by a third party for humane practices and only purchases seafood listed on the Monterey Bay Aquarium's Seafood Watch Good Alternative or Best Choice List.
- Brown's California Cafe, a campus restaurant dedicated to showcasing sustainability, serves only organic produce. 90% of the ingredients used at this location are locally grown or verified by a third party for sustainable practices.
- Berkeley uses equivalent programs to most of the certifications listed in this credit. The following is an explanation for how UC Berkeley settled on the alternatives to the certification programs:
 - Berkeley is able to recover significantly more food through Copia than it can through the Food Recovery Network. Copia is not currently operating nationally.
 - The Alameda County Green Business Certification offers a similar program to the Green Restaurant Association (GRA) at no cost.
 - Berkeley chose the Monterey Bay Aquarium (MBA) Seafood Watch Business Partner because MBA does not charge the fisheries to be certified.

Stanford University------1.67/6.00

- Percentage of food and beverage products that are third party verified or Local & Community-Based: 24%
- Percentage of total food and beverage products that do NOT qualify in either the Third Party Verified or Local & Community-Based category: 24%
- Stanford prefers to purchase food that is:
 - Local: We prefer food that is grown, raised or processed locally in order to sustain our local economies and minimize transport, especially of fresh fruit and vegetables.
 We define three tiers of location: local is within 150 miles, regional is within 250 miles, and statewide refers to California grown produce.
 - Direct: We prefer to purchase food directly from independently-owned growers, producers and manufacturers. We also prioritize purchasing food from women and/or minority owned businesses.
 - Organic: We prefer organically grown food to minimize exposure to harmful
 pesticides, herbicides, fungicides, and chemical fertilizers for both our customers,
 farmworkers, pollinators and wildlife, and the environment.
 - o Agroecological: We prefer to source from farms that plant a diverse number of crops,

- as opposed to a monoculture, and employ agroecological methods of farming that protect and enhance soil health, biodiversity, and protect and preserve ecosystems.
- Humane: We prefer meat and dairy products from animals that are treated humanely and allowed to express their natural behaviors. All of our beef is grass-fed.
- Raised without Antibiotics & Hormones: All of our chicken, beef, pork butt, and milk must be raised without antibiotics.
- Fair: We prefer Fair Trade certified products over those that are not certified. Our coffee is Fair Trade certified.
- Sustainable Fisheries: We ensure that all of our seafood is Monterey Bay Aquarium Seafood Watch approved.
- Beef purchased by R&DE is grass-fed and pasture raised for its entire life and therefore Stanford considers it sustainable. However, it does not have a third party certification, so it does not qualify within AASHE's definition and therefore is not included in the sustainable spend total reported in this credit.



OP9: Landscape Management

Points: 2

UW-Madison:	0.00
Peer Group:	0.98
Big 10:	0.80
UW System:	0.82
Overall:	0.78

Highest Scoring Universities from Peer Group:

•	University of Texas at Austin:		1.94
•	Emory University:		1.73
•	Northwestern University:		1.50
•	University of Washington, Seattle:	1.17	
•	University of Colorado Boulder:		1.08
•	University of Georgia:		1.02

- 8/21 peer universities scored 1.00/2.00
- UW-Madison scored lower than 21/21 universities from the peer group

Credit Description

This credit recognizes institutions that practice sustainable landscape management to meet human needs while maintaining healthy ecosystems

Criteria

Institutions have two options for managing grounds:

- 1. An Integrated Pest Management (IPA)
 - a. Uses a combination of tools (biological, cultural, chemical, etc.) to solve pest problems while minimizing risks to people and the environment
 - b. Must be a four-tiered approach
- 2. An organic land care standard or landscape management program that eliminates the use of inorganic fertilizers and chemical pesticides/fungicides/herbicides
 - a. Uses ecologically preferable materials (OMRI listed products and/or IFOAM-endorsed standard products)
- An area of grounds may be managed organically or in accordance with an IPM program that uses selected chemicals, but not both

Scoring

2 points:

- Maximum points are earned when 100% of campus grounds are managed in accordance with a program that has eliminated the use of inorganic fertilizers and chemical pesticides/fungicides/herbicides
- Incremental points are available based on percentage
- Partial points are available based on the level of management

Management level	Factor	Multiply	Area managed at each level	Divide	Total area of managed grounds	Equals	Points earned
Conventional program	0						
IPM program	1	×		÷		=	
Organic program	2						
Total points earned →							Up to 2

No Substantive Changes from $v.2.1 \rightarrow v.2.2$

University of Wisconsin-Madison ----- 0.00/2.00

Approaches to sustainable land management:

- Main campus is maintained using a conventional landscape practice that incorporates IPM principals
- An IPM program is established for the campus greenhouse, and is expected to be expanded to the entire campus soon
- The Arboretum and Lake Shore Nature Preserve are both maintained under a sustainable management program. However, due to the spot chemical herbicide spot treatment used on invasive species, this area doesn't count for this credit

University of Texas at Austin ----- 1.94/2.00

Percentage of grounds managed in accordance with an IPM program: 0%

Percentage of grounds managed in accordance with an organic program: 96.91%

Description of the organic landscape management program:

- Since 2010, the UT landscape services has used locally sourced organic fertilizers and supplements (molasses, seaweed, bio-char), homemade leaf mold compost and in-house brewed compost tea
- The only chemicals that are used are:
 - o Pesticide to keep fire ants off turf grass areas where large events are held
 - Herbicide to treat invasive plants
- All new landscape staff are trained with organic landscaping during on-boarding

Approach to plant stewardship:

- Only plants native species on campus
- Enforces a tree protection standard
- Re-purposes large volumes of wood

Approach to hydrology and water use:

- Utilizes bioswales to minimize runoff into the storm water system
- Uses rain water harvesting on newer buildings

Approach to materials management and waste minimization:

- Landscape material is collected and brought back to the services office
 - o Tree limbs are taken off-site and turned into mulch
 - Leaves are turned into compost
 - o Large tree limbs are used to create furniture, accessories, and award plaques

University of Texas at Austin ----- 1.73/2.00

Percentage of grounds managed in accordance with an IPM program: 27.44%

Percentage of grounds managed in accordance with an organic program: 72.56%

Description of the organic landscape management program:

- The Committee on the Environment and Campus Services developed an **Emory University Forest Management Plan**
 - o Goal is to create, restore, enhance, and maintain forested areas
- A combination of practices is used to eliminate inorganic fertilizers and chemicals, explained in depth below
- In 2014, Emory became the first university in the country to ban neonicotinoid pesticides and implement a pollinator protection campaign
 - o Official Announcement

Approach to plant stewardship:

• All plant material must comply with the Landscape Master Plan Palette, which is a list of native plants specific to the area

Approach to hydrology and water use:

- Practices streambank restoration and management, which includes planting pollinator-attractive plants and utilizing green infrastructure for storm water and runoff
- Cisterns are used to harvest rainwater, which is used for irrigation, buildings, or toilets
- Bioretention swales are used to filter storm water runoff from pavement

Approach to energy-efficient landscape design:

- Conscious effort to reduce heat islands and minimize impacts on microclimates and wildlife habitats
 - This is done by providing shade or high-albedo materials to provide coverage for sites

University of Washington, Seattle ----- 1.17/2.00

Percentage of grounds managed in accordance with an IPM program: 83.05%

Description of the IPM program:

- Established in 2012
- Details the tolerance and maintenance levels for pests that vary depending on priority and area. Criteria are established for each zone
- Pest prevention, monitoring/detection, evaluation, and response are all detailed steps
- When a pest exceeds the level of tolerance, a management approach is taken based on evaluating the priority, species, resources, cost, timing, size/topography of the area, proximity to environmentally sensitive areas, and best practices

Percentage of grounds managed in accordance with an organic program: 16.95%

Description of the organic landscape management program:

 Areas within and bordering the Union Bay Natural Area are managed under a sustainable landscape management program that prohibits the use of any inorganic fertilizer or chemical pesticides

Approach to plant stewardship:

- Grounds Management uses an ecosystem-based strategy to prioritize preventing invasive species populations
 - Mechanical and manual control methods are implemented first
 - O Chemical treatments are only used after unsuccessful attempts at controlling invasive species through cultural or manual means
 - Majority of chemical treatments are selective, spot treatments

Approach to hydrology and water use:

- High-efficiency, flow-managed, drip irrigation is used throughout campus to ensure no excess water is applied to landscapes
- The 6.5 acres of green roofs have permeable surfaces that utilize natural filtration to improve water runoff quality

- Nearly half of the Bothell campus's 135 acres is restored floodplain wetland, where all campus storm water is discharged
- Tacoma's campus has a RainBird hydro system that covers 80% of grounds

Approach to materials management and waste minimization:

- Grass clippings from turf are moved back in to the field to reduce the amount of waste
- Recycled wood chips are used instead of purchasing landscape mulch
- There is an on-site compost facility
 - o Coffee grounds are used to create organic soil

Approach to energy-efficient landscape design:

- Buildings are purposely shaded by large trees, and considered in all new projects
- Green walls are included in architectural building on campus

Other approaches to sustainable landscape management:

- Salt is not used for snow and ice removal
 - o Instead, non-sodium chloride liquid de-icers are selectively used on occasion
- Campus trees are recycled through a program that repurposes the wood in furniture products such as benches or tables



OP15: Campus Fleet

Points: 1

 UW-Madison:
 0.05

 Peer Group:
 0.25

 Big 10:
 0.17

 UW-System:
 0.05

 Overall:
 0.20

Highest Scoring Institutions from Peer Group

• University of Washington, Seattle: 0.97

University of California - San Diego: 0.62
 University of California - Irvine: 0.52
 Stanford University: 0.44

• 11/21 scored < 0.25

Description of Credit

Scoring based upon the **percentage of fleet vehicles that are alternatively fueled and/or powered**. Alternative fuel and power technologies include:

- Gasoline-electric hybrid
- Diesel-electric hybrid
- Plug-in hybrid
- 100 percent electric (including electric assist utility bicycles and tricycles)
- Fueled with Compressed Natural Gas (CNG)
- Hydrogen fueled
- Fueled with B20 or higher biofuel for more than 4 months of the year
- Fueled with locally produced, low-level (e.g., B5) biofuel for more than 4 months of the year (e.g., fuel contains cooking oil recovered and recycled on campus or in the local community)

Scoring

Institutions earn the maximum of 1 point available for this credit when all vehicles in their fleets are alternatively fueled and/or powered. Partial points are awarded proportional to the percentage of fleet vehicles that are alternatively fueled and/or powered. For example, an institution for which gasoline-electric hybrid vehicles comprise 50 percent of the total fleet (and the remaining vehicles are traditional, gasoline fueled) would earn 0.5 points.

No Substantive Changes from 2.1 \rightarrow 2.2

University of Wisconsin-Madison ------ 0.05/1.00

- 43 of UW-Madison's 887 fleet vehicles are alternatively fueled and/or powered
- In addition to the alternative fuel vehicles reported, an additional 95 of UW-Madison's vehicles are low speed vehicles (Suzuki Shuttles, Mitsubishi Low Speed Pickups, etc.) with an average MPG of 40

University of Washington, Seattle ------ 0.97/1.00

- 680 of the University of Washington's 700 fleet vehicles are alternatively fueled and/or powered
- 535 of those are fueled by biofuels for more than 4 months of the year
- The remaining are either electric (45) or electric hybrid (100) vehicles

Iowa State University ----- 0.05/1.00

- In the 2016 STARS report, 366 of Iowa State's 556 fleet vehicles were alternatively fueled and/or powered with 349 of those are fueled by biofuels for more than 4 months of the year
 - o In that report, Iowa State scored 0.66 for this credit
- In their 2019 STARS report only 53 of their 739 fleet vehicles are alternatively fueled

University of California – San Diego ----- 0.62/1.00

- 539 of the UC San Diego's 1026 fleet vehicles are electric (436) or electric hybrid (103) vehicles
- UC San Diego has a goal that by 2025, zero-emission vehicles or hybrid vehicles shall account for at least 50 percent of all new light-duty vehicles acquisitions
- UC San Diego works with dealerships to provide <u>exclusive electric vehicle leasing and purchasing</u> <u>opportunities</u> for students, faculty, staff and retirees

University of California – Irvine ----- 0.52/1.00

- 245 of the UC Irvine's 555 fleet vehicles are electric (212) or electric hybrid (33) vehicles
- UC Irvine Transportation created Electrify UCI, a fleet electrification plan designed to help the university meet its future carbon neutrality goals. In this, all new vehicle purchase requests are submitted to the Sustainable Transportation department to ensure the new acquisition is a clean vehicle (preferably electric) for approval if it meets clean vehicle standards.
- UC Irvine's Pump2Plug is one of the first university incentive programs that encourages staff and students to convert from fossil fuel vehicles to electric and plug-in vehicles by offering 3 years of free Level 1 charging and reduced-cost Level 2 charging on campus.

OP17: Employee Commute Modal Split

Points: 2

UW-Madison:	0.98
Peer Group:	0.90
Big 10:	0.57
UW-System:	0.55
Overall:	0.45

Highest Scoring Institutions from Peer Group

•	University of California - Irvine:		1.35
•	University of Washington, Seattle:	1.27	
•	University of Texas at Austin:		1.26
•	University of California - Berkeley:	1.21	
•	University of Illinois at Chicago:		1.20
•	University of California - San Diego:		1.14
•	Emory University:		1.14

Description of Credit

Scoring based upon the **percentage of employees who use more sustainable commuting options.** Sustainable commuting options include transportation modes that do not involve single-occupancy vehicles.

Scoring

Institutions earn the maximum of 2 points available for this credit when all employees use more sustainable modes of transportation for getting to and from campus. Partial points are awarded proportional to the percentage of employees that use more sustainable commuting options. For example, an institution for which 50 percent of employees use more sustainable modes and the other 50 percent drive alone would earn 1 point.

Changes from $2.1 \rightarrow 2.2$

- Credit merged with OP16 into new "Commute Modal Split" credit worth 5 total points
- Points awarded based upon the same criteria but total points available for the employee commute modal split portion of the new credit is based upon the relative proportion of employees to students

University of Wisconsin-Madison ----- 0.98/2.00

- 49% of UW-Madison employees travel to and from campus using more sustainable commuting options
- Data was obtained from the 2018 Biennial Transportation Survey

University of California – Irvine ----- 1.35/2.00

- 67% of UC Irvine's employees travel to and from campus using more sustainable commuting options
- Of those who use sustainable transportation options, the majority walk, bike or use other non-motorized means (40% of employees)
- 5% of employees telecommute
- Data obtained from parking permit purchases and annual survey

University of Washington, Seattle ------ 1.27/2.00

- 63% of University of Washington, Seattle's employees travel to and from campus using more sustainable commuting options
- Of those who use sustainable transportation options, the majority take a campus shuttle or public transportation (37% of employees)
- 8% of employees telecommute
- Data obtained from biennial survey

University of Illinois at Chicago ------ 1.20/2.00

- 60% of UIC's employees travel to and from campus using more sustainable commuting options
- Of those who use sustainable transportation options, the majority take a campus shuttle or public transportation (40% of employees)
- Data obtained from survey

Emory University ----- 1.14/4.00

- 57% of Emory University's employees travel to and from campus using more sustainable commuting options
- Of those who use sustainable transportation options, the majority take a campus shuttle or public transportation (51% of employees)
- Data was obtained from parking permit purchases and assumption that all employees who do not have a parking permit use a more sustainable commuting option

OP19: Waste Minimization and Diversion

Points: 8

 UW-Madison:
 3.58

 Peer Group:
 3.29

 Big 10:
 2.86

 UW-System:
 3.04

 Overall:
 2.23

Highest Scoring Institutions from Peer Group

• Iowa State University: 5.13

• University of California - Berkeley: 5.02

• University of California - Irvine: 5.01

University of Washington, Seattle: 4.55
Cornell University: 4.36
University of Utah: 4.29

Charford University

Stanford University: 4.02

• 7/21 scored < 3.00

Description of Credit

Scoring based upon whether an **institution has reduced the total amount of waste generated and the proportion of waste diverted from the landfill or incinerator.** Specifically, the credit measures whether:

- An institution has reduced the total amount of waste generated (materials diverted + materials disposed) per weighted campus user compared to a baseline
- An institution has reduced total waste generation below the minimum performance threshold of 0.5 tons per weighted campus user
- An institution diverts materials from the landfill or incinerator by recycling, composting, donating or re-selling.

Scoring

Part 1 – Waste Generated per Weighted Campus User

Institutions earn maximum points of 2.5 points available for Part 1 by reducing their total waste generation by 50 percent or more compared to a baseline. Partial points are awarded proportional to the percentage reduction achieved. For example, an institution that reduced the total amount of waste generated by 25 percent would earn 1.25 points.

Part 2 – Waste Generated

An institution earns the maximum of 2.5 points available for Part 2 when its total annual waste generation per weighted campus user is 90 percent less than the minimum performance threshold of 0.50 short tons. Partial points are awarded proportional to the percentage reduction achieved. For example, an institution that generates 0.275 tons of waste per weighted campus user (45 percent less than the threshold) would earn 1.25 points (half of the points available for Part 2).

Part 3 – Waste Diverted

Institutions earn the maximum of 3 points available for Part 3 by diverting 100 percent of waste from the landfill or incinerator. Partial points are awarded proportional to the percentage diversion achieved. For example, an institution that diverts 50 percent of its waste through recycling, composting, donating or reselling would earn 1.5 points.

No Substantive Changes from 2.1 \rightarrow *2.2*

University of Wisconsin-Madison ----- 3.58/8.00

- 13.39% reduction in total waste generated per weighted campus user from baseline
- 0.21 tons of waste generated per weighted campus user
- 43.56% of materials diverted from the landfill or incinerator

Iowa State University ----- 5.13/8.00

- 30.06% reduction in total waste generated per weighted campus user from baseline
- 0.16 tons of waste generated per weighted campus user
- 57.77% of materials diverted from the landfill or incinerator
- Waste audit in General Services Building, resulting in 80% improvement in diversion rate. Meeting
 with campus recycle coordinators to develop improved recycle program and identify other locations
 for waste audits.

University of California – Berkeley ------ 5.02/8.00

- 32.30% reduction in total waste generated per weighted campus user from baseline
- 0.18 tons of waste generated per weighted campus user
- 53.68% of materials diverted from the landfill or incinerator
- Waste Audit Team perform waste audits for different buildings on campus. The team conducts
 multiple daylong audits to get a full assessment of a building's waste stream to better address ways
 the building can improve its waste sorting and decrease the amount of waste produced.
- Cal Zero Waste and our Green Labs works with our procurement department on identifying and buying more products that prevent waste.

University of California – Irvine ------ 5.01/8.00

- 25.48% reduction in total waste generated per weighted campus user from baseline
- 0.28 tons of waste generated per weighted campus user
- 83.12% of materials diverted from the landfill or incinerator
- UC Irvine staff have done waste audits at both the MSW and Commingled Recycling transfer stations
 to identify what items are getting into the wrong streams, they can then target those items in our
 student and staff education.
 - Diversion rates are shared with student housing residents each quarter so they can see how their housing unit stacks up to others; this creates a healthy completion among housing communities

- UC Irvine uses standardized signs throughout campus with a color coded system but they also use different colored bin liners so the custodial team can deposited each stream in the correct bin.
- Participated in RecycleMania Competition for over 6 years
- University of California's Sustainable Practices Policy strives to eliminate all materials sent to the landfill by 2020
 - o Internal purchasing site lists the most sustainable items first

University of Washington, Seattle ------ 4.55/8.00

- 19.13% reduction in total waste generated per weighted campus user from baseline
- 0.18 tons of waste generated per weighted campus user
- 60.93% of materials diverted from the landfill or incinerator
- Participates in RecycleMania Competition
- Commissioned third waste characterization study to evaluate the effectiveness of the waste reduction and recycling programs and identify opportunities for increased material recovery to meet or exceed Seattle's 70% recycling goal by 2020.
 - o Results available here: https://facilities.uw.edu/blog/posts/2018/11/29/waste-characterization-study



OP20: Construction and Demolition Waste Diversion

Points: 1

 UW-Madison:
 0.59

 Peer Group:
 0.75

 Big 10:
 0.54

 UW-System:
 0.60

 Overall:
 0.55

Highest Scoring Institutions from Peer Group

• University of California - Berkeley: 1.00

University of California - Irvine: 0.97
Emory University: 0.97
Iowa State University: 0.81

• 12/21 scored >0.80

Description of Credit

Scoring based upon the percentage construction and demolition materials diverted from the landfill or incinerator.

Scoring

Institutions earn the maximum of 1 point available for this credit by diverting all of their non-hazardous construction and demolition waste from the landfill or incinerator. Partial points are awarded proportional to the percentage diversion achieved. For example, an institution that diverts 50 percent of its waste through recycling, composting, donating or reselling would earn 0.5 points.

No Substantive Changes from 2.1 \rightarrow 2.2

University of Wisconsin-Madison ------ 0.59/1.00

• 58.61% of the 4,155.97 tons of construction and demolition waste generated in FY18 was diverted from the landfill or incinerator

University of California – Berkeley ------ 1.00/1.00

- 100% of the 338.49 tons of construction and demolition waste generated was diverted from the landfill or incinerator
- Construction contracts require recycling and diversion and set a goal of 75%. Campus project managers monitor contractor's adherence to diversion practices.

University of California – Irvine ------ 0.97/1.00

- 97% of the 2894.2 tons of construction and demolition waste generated was diverted from the landfill or incinerator
- UC Irvine projects are required to meet a minimum level of LEED Silver certification and compliance
 includes a LEED Credit requirement to divert a minimum of 75% of construction and demolition
 waste. LEED accredited construction staff monitor C&D waste generation and recovery and maintain
 documentation to confirm waste diversion compliance.
- UC Irvine uses Hot In-Place Asphalt replacement program instead of the traditional asphalt removal and replacement. With specialized equipment UC Irvine is able to use the existing asphalt by melting the damaged asphalt and resurfacing the road
 - This eliminates trucking of used asphalt and recycles the asphalt to be used in the new road surface replacement.

Emory University ----- 0.97/1.00

- 97% of the 5683.09 tons of construction and demolition waste generated was diverted from the landfill or incinerator
- Emory's Sustainability Vision set goals for composting, recycling, or reusing at least 95% of building construction material.

Iowa State University ----- 0.81/1.00

- 81% of the 21,170.29 tons of construction and demolition waste generated was diverted from the landfill or incinerator
- Builders are encouraged to salvage, reuse, or sell as much of the demolition and construction waste materials as possible, with the goal of diverting no less than 75% of demolition and construction waste materials from the landfill.



PA2: Sustainability Planning

Points: 4

 UW-Madison:
 2.50

 Peer Group:
 3.58

 BIG 10:
 3.29

 UW-System:
 2.86

 Overall:
 2.76

Highest Scoring Universities from Peer Group:

University of Georgia: 4.00/4.00University of Virginia: 4.00/4.00

• University of Illinois at Chicago: 4.00/4.00

• **18/21** peer universities scored 3.00/4.00 or higher with **12/21** scoring 4.00/4.00

Description of Credit

This credit recognizes institutions that have developed comprehensive plans to move toward sustainability.

Criteria

Part 1. Measurable sustainability objectives

Institution has published one or more written plans that include measurable sustainability objectives addressing one or more of the following areas:

- Curriculum
- Research
- Campus Engagement
- Public Engagement
- Air & Climate
- Buildings
- Energy
- Food & Dining
- Grounds
- Purchasing
- Transportation
- Waste
- Water
- Diversity & Affordability
- Investment & Finance
- Wellbeing & Work
- Other (arts and culture or technology

Scoring

Institutions earn 0.25 points for each of the areas listed for which they have published plans that include at least one measurable sustainability objective.

Changes from $2.1 \rightarrow 2.2$

- There are now two parts of this credit, each scored independently.
- V2.1: institution earned points for integrating sustainability in campus planning covering 16 different topics (e.g., Research, Transportation, Grounds, Food, Wellbeing, etc.,)
 - Institution earned 0.25 points for each of the areas for which they have published written plans that include measurable sustainability objectives. Addressing all 16 earned an institution full points.
- V2.2:
 - Institution earns two points for integrating sustainability in campus planning related to the four core areas of STARS (Academics, Engagement, Operations, and Administration.) Two points for addressing all four.
 - Institution earns two points for integrating sustainability as a major theme in its highest guiding document. Partial points available for integrating sustainability but not as a major theme.

University of Wisconsin-Madison-----2.50/4.00

University plans that include sustainability at a high level:

- Strategic Framework for UW Madison
- Sustainability Plan
- Campus Master Plan
 - Landscape Master Plan
 - Utility Master Plan
 - Long Range Transportation Plan Green Infrastructure and Stormwater Management Plan
- Campus Design Guidelines & Standards
- Diversity Implementation Plan
- Civic Action Plan
- Campus IT Strategic Plan
- UWell (Health and Wellbeing) Strategic Plan
- State Policies and Guidelines for Facility Use and Design

The above plans address/ do not address the following:

Topic areas addressed	Topic areas <u>not</u> addressed
Campus Engagement	Curriculum
Public Engagement	Research
Buildings	Air & Climate
Energy	Food & Dining
Transportation	Grounds
Waste	Purchasing
Water	Investment & Finance
Diversity & Affordability	
Wellbeing & Work	
Other: Information Technology	

Institution's formal statement of support endorsed by its governing body:

• Sustainability is woven into the fabric of the University of Wisconsin–Madison. Our commitment to conservation and stewardship now runs through every aspect of our campus as we continue striving toward a more sustainable community.

The institution's definition of sustainability:

None

University of Georgia ------4.00/4.00

University plans that include sustainability at a high level:

- UGA Strategic Plan, Building on Excellence: UGA 2020
- UGA Sustainability Plan
- Finance and Administration Strategic Plan
- 2010-2015 Office of Sustainability Strategic Plan
- 2008 UGA Master Plan (current)

The above plans include measurable sustainability objectives that address all 16 topic areas to earn credit.

Institution's formal statement of support endorsed by its governing body:

None

The institutions definition of sustainability:

- None
- However, the following is in the introductory paragraph of UGA Strategic Plan, Strategic Direct VII, Improving Stewardship of Natural Resources and Advancing Campus Sustainability:
 - A sustainable university is one that meets the needs of the present without compromising the ability of future generations to meet their needs. It also creates opportunities for students, faculty, and staff to enhance the quality of life throughout their communities. A sustainable university acts as a living laboratory where sustainability is researched, taught, tested, and constantly refine

University of Virginia------4.00/4.00

University plans that include sustainability at a high level:

- UVA Sustainability Plan
- Climate Action Plan
- Bicycle Master Plan
- Brandon Avenue Master Plan
- Grounds Plan
- Landscape Master Plan

The above plans include measurable sustainability objectives that address all 16 topic areas to earn credit.

Institution's formal statement of support endorsed by its governing body:

• "The University will utilize the highest standards of environmental stewardship and resource conservation and will address other areas of concern beyond greenhouse gas emissions and nitrogen, such as waste, water, stream and river protection, noise and light pollution, open space protection, and conservation of the historical and cultural legacy of the community."

The institution's definition of sustainability:

"Sustainability at the University of Virginia calls for collaboration and ingenuity to promote
the well-being of the community, solve local and global challenges through scholarship and
practice, educate ethical leaders and steward this special place."

University of Illinois at Chicago -----4.00/4.00

University plans that include sustainability at a high level:

- UIC Strategic Framework
- Climate Action Implementation Plan (CAIP)
- Campus Master Plan
- Multimodal Transportation Plan
- Tree Care Plan
- Diversity Strategic Plan

The above plans include measurable sustainability objectives that address all 16 topic areas to earn credit.

University's formal statement of support from its governing body:

- We will incorporate practices that reduce our carbon footprint and build a System-wide culture of environmental care, supporting the efforts of our universities and campuses to achieve carbon neutrality over the next three to four decades. To do this, our universities and regional campuses will actively seek:
 - Climate neutrality by increasing building energy efficiency, achieving LEED
 certification for construction and renovations, enhancing the efficiency of campus
 fleets and shuttle buses, and becoming more pedestrian and bicycle friendly.
 - Zero waste by increasing waste diversion rates, reducing bottled water use, and increasing the number of green-certified campus events.
 - Net zero water use by managing and reducing stormwater runoff within parking lots and structures and reducing water use through more efficient technology and practices.
 - Campus biodiversity by promoting the use of local produce, increasing tree canopy size and the diversity of plants on campus, and using sustainable landscaping practices.

The institution's definition of sustainability:

• Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. Sustainability creates and maintains the conditions under which humans and nature can exist in productive harmony, that permit the fulfillment of the social, economic and other requirements of present and future generations

PA3: Inclusive and Participatory Governance

Points: 3

 UW-Madison:
 1.50

 Peer Group:
 2.26

 BIG 10:
 2.09

 UW-System:
 1.69

 Overall:
 1.83

Highest Scoring Universities from Peer Group:

• University of California, Irvine: 3.00/3.00

Cornell University: 3.00/3.00

• University of Georgia: 3.00/3.00

Description of Credit

This credit recognizes institutions that engage students, staff, faculty and local community members in the ongoing governance of the college or university.

Criteria

Part 1: Institution has adopted a framework for engaging internal stakeholders (i.e., students, staff, faculty) in governance. The framework includes:

• Representative bodies through which students, staff and/or faculty can each participate in governance (e.g., student council, staff council, faculty senate);

And/or

• Elected student, staff and/or faculty representatives on the institution's highest governing body. To count, representatives must be elected by their peers or appointed by a representative student, staff or faculty body or organization.

Part 2: Institution has adopted a framework for engaging external stakeholders (i.e., local community members) in the institution's governance, strategy and operations. The framework includes:

• Written policies and procedures to identify and engage local residents in land use planning, capital investment projects, and other institutional decisions that affect the broader community (e.g., development projects that impact adjacent neighborhoods);

And/or

- Formal participatory or shared governance bodies (e.g., seats on the institution's governing body and/or a formally recognized board, council or committee) through which community members representing the interests of the following stakeholder groups can regularly participate in institutional governance:
 - Local government and/or educational organizations;
 - Private sector organizations; and/or
 - Civil society (e.g., non-governmental organizations and nonprofit organizations).

Scoring

- Institutions earn the maximum of 1.5 points available for Part 1 by meeting both of the criteria outlined above for students, staff, and faculty, 0.25 points for each
- Institutions earn the maximum of 1.5 points available for Part 2 by meeting all of the criteria outlined above for students, staff, and faculty, 0.25 points for each

Changes from $2.1 \rightarrow 2.2$

- There are now four parts to this credit instead of two.
- Inclusion, most notably gender inclusion, is a more rigorous part of v2.2.
- Community engagement credit is less stringent on the type of engagement necessary to qualify for points.

University of Wisconsin-Madison------1.50/3.00

Do the institutions students, staff, and teaching and research faculty have an elected representative on the institutions highest governing body?

• No, these groups (specifically representing UW-Madison) are not represented on the Board of Regents.

Does the institution have written policies and procedures to identify and engage external stakeholders (i.e. local residents) in land use planning, capital investment projects, and other institutional decisions that affect the community?

• Yes: Campus Neighborhood Association and UW-Madison Design Review Board

Does the institution have formal participatory or shared governance bodies through which community members representing the interests of the following stakeholder groups can regularly participate in institutional governance?

- Local government and/ or educational organizations: No
- Private Sector Organizations: No
- Civil Society (e.g. NGOs, NPOs): No

University of California, Irvine-----3.00/3.00

Do the institutions students, staff, and teaching and research faculty have an elected representative on the institutions highest governing body?

- Student representative on the UC System's Board of Regents
 - Does not have to be from UCI
- Two 'Staff Advisors to the Regents' are appointed
 - Does not have to be from UCI
- Two Faculty representatives from the UC academic senate sit in the UC Board of Regents as advisors
 - Does not have to be from UCI

Does the institution have written policies and procedures to identify and engage external stakeholders (i.e. local residents) in land use planning, capital investment projects, and other institutional decisions that affect the community?

- Campus Planning MOU with surrounding communities
- Long Range Development Plan
- UCI's Office of Environmental Planning and Sustainability promotes environmentally
 responsible development and redevelopment of land under UCI's jurisdiction. This includes
 advising the campus administration on land use and environmental planning as well as
 engaging with public agencies, such as the Cities of Irvine and Newport Beach, and private
 stakeholders. The office coordinates monthly meetings with local agencies and public
 notification of UCI projects to foster community engagement.

Does the institution have formal participatory or shared governance bodies through which community members representing the interests of the following stakeholder groups can regularly participate in institutional governance?

- Local government and/ or educational organizations: Yes
 - Coastal/Central Orange County Natural Communities Coalition (NCC) is composed
 of local, regional, state, and federal agencies; local and state fire authorities; NGOs;
 and private landowners. NCC oversees the long term management and governance of
 open space areas owned by UCI and other private sector and public landowners that
 jointly comprise 37,000 acres of habitat.
- Private Sector Organizations: Yes
 - UCI CEO Roundtable is composed of CEOs from local industry and nonprofits/NGOs that serve in an advisory role to the UCI Chancellor on a broad range of governance and related issues.
- Civil Societies (e.g. NGOs, NPOs): Yes
 - UCI CEO Roundtable

Cornell University------3.00/3.00

Do the institutions students, staff, and teaching and research faculty have an elected representative on the institutions highest governing body?

- Students: 2 voting seats on the Board of Trustees
- Staff: 1 voting seat on the Board of Trustees
- Faculty: 1 voting seat on the Board of Trustees

Does the institution have written policies and procedures to identify and engage external stakeholders (i.e. local residents) in land use planning, capital investment projects, and other institutional decisions that affect the community?

• There are a variety of internal protocols regarding areas of shared campus-community interest - and when appropriate related voluntary contributions, specifically related to housing, infrastructure, public schools, health care, environment, economic development and diversity.

Does the institution have formal participatory or shared governance bodies through which community members representing the interests of the following stakeholder groups can regularly participate in institutional governance?

- CR serves as a liaison between Cornell and the community, and assists students, staff and
 faculty on various town-gown topics, challenges and opportunities. Collectively, staffers
 serve on several campus and community boards and committees.
- CR meets regularly with local governments, schools, non-profits, businesses, and special interest groups, and holds monthly "office hours" in municipalities around Tompkins County to address housing for students and employees, economic development, pre-K-12 and educational services, health care, infrastructure, environment, and access to quality air and bus service.

University of Georgia------3.00/3.00

Do the institutions students, staff, and teaching and research faculty have an elected representative on the institutions highest governing body?

- The elected President of SGA and the elected President of GSA serve as voting members on the Executive Committee of the University's highest governing body, University Council.
- 17 total elected student representatives including the President and Vice President of the Student Government Association serve on the University Council, the highest governing body at UGA, which reports to the Board of Regents.
- 9 elected staff council representatives serve on University Council
- One faculty member shall be elected by the faculties of each of the several schools and colleges. Faculty members shall vote in the school or college in which they are a member. A number of additional members shall be elected by the faculties of each of the schools and colleges, one for each twenty full-time faculty members, other than county extension personnel, rounded to the nearest multiple of 20

Does the institution have formal participatory or shared governance bodies through which community members representing the interests of the following stakeholder groups can regularly participate in institutional governance?

- Local Government and/ or educational organizations: Yes
- Private Sector Organizations: Yes
- Civil Societies (e.g. NGOs, NPOs): Yes

• "The Office of Community Relations at UGA functions to build strong partnerships and links between the University and the Athens-Clarke County community, government, businesses, neighborhoods, non-profit organizations and community leaders and individuals. The University works with the Athens community through active participation in discussions, coalitions, meetings and outreach projects to build and maintain relationships, while making a positive difference in the Athens area. The Office also serves as a resource for faculty, staff, and students who are seeking information or assistance with local government matters or issues."



PA8: Committee on Investor Responsibility

Points: 2

UW-Madison:	0.00
Peer Group:	0.60
BIG 10:	0.33
UW-System:	0.00
Other:	0.46

Highest Scoring Universities from Peer Group:

•	University of California, Berkeley	2.00
•	University of California, Irvine	2.00
•	University of California, San Diego	2.00
•	University of Utah	2.00
•	Northwestern University	2.00
•	University of Illinois at Chicago	1.00
•	Stanford University	1.00

• 13/21 peer universities scored 0.00/2.00

Description of Credit

This credit recognizes institutions that have an **established and active committee on investor responsibility (CIR)**, which provides structure for dialogue that helps to promote sustainability in campus investment decisions

Criteria

- <u>Committee on Investor Responsibility (CIR)</u>: Committee that ensures an institution's investments are aligned with its mission and goals, with consideration to social and environmental responsibility
 - o Makes recommendations for socially and environmentally responsible investments across an institution's asset class
- Multi-stakeholder representation (faculty, staff, and students) is encouraged and counts for higher points
- A general committee that oversees the institution's investments doesn't count unless social
 and environmental responsibility is an explicit part of its mission and/or a regular part of its
 agenda.

Scoring

2 points: CIR has representatives from the stakeholder groups: Academic Staff: 0.5 ptsNon-Academic Staff: 0.5 pts

Students: 0.5 pts

1.0 pts

- Maximum points are earned for having multi-stakeholder representation in the CIR, which includes academic staff, non-academic staff, and students
- Partial points are available for having some of these groups, but not all

Changes from $v.2.1 \rightarrow v.2.2$

Changing from PA8 → PA9

University of Wisconsin-Madison ----- 0.00/2.00

Does the institution have a formally established and active committee on investor responsibility (CIR) that makes recommendations to fund decision-makers on socially and environmentally responsible investment opportunities across asset classes?: **No**

University of California (Berkeley/Irvine/San Diego) ----- 2.00/2.00 CIR includes staff, faculty, and student representation

- In 2014, the University of California's Office of the Chief Investment Officer (OCIO) developed and adopted a **framework on sustainable investment**
 - o Applies to the whole University of California system
 - Designed to guide the evaluation of environmental sustainability, social responsibility and governance (ESG) into the investment process of the OCIO
 - ESG framework and mission³³
- ESG policy decisions are reviewed by the Investment Committee and entire governing board (Board of Regents)
 - Social and environmental responsibility are an explicit part of the mission and a regular part of the agenda
- There is a sustainability objective incorporated into investment policy statement³⁴

³³ Excerpt: "We believe that integrating risk evaluation of environmental sustainability, social responsibility and prudent governance factors more systematically into our evaluation processes and into the processes of our external fund managers is increasingly necessary to provide the most accurate risk-reward calculation."

³⁴ "The Office of the Chief Investment Officer shall incorporate environmental sustainability, social responsibility and governance (ESG) into the investment evaluation process as part of its overall risk assessment in its investments decision making."..." The Office of the Chief Investment Officer uses a proprietary sustainability framework to provide core universal principles that inform the decisions and assist in the process of investment evaluation."

University of Utah ----- 2.00/2.00

CIR includes staff, faculty, and student representation

- The Socially Responsible and Environmentally Sustainable Investment Advisory Committee (SRESIAC) advises and provides guidance to the Investment Advisory Committee on **endowment investment, infrastructure investment, and other investment initiatives** in ways that are socially responsible and environmentally sustainable
 - o SRESIAC is given feedback on how advice is considered
 - SRESIAC reports activities and results to the Sustainability Office and the Academic Senate



^{*}These are the only universities with good/updated examples of best practices for this credit

PA9: Sustainable Investment

Points: 4

UW-Madison:	0.00
Peer Group:	0.84
Big 10:	0.43
UW-System:	0.59
Overall:	0.50

Highest Scoring Universities from Peer Group:

•	University of Washington, Seattle:	3.05
•	University of California, Berkeley:	2.13
•	University of California, Irvine:	2.09
•	University of California, San Diego:	2.09
•	University of Colorado, Boulder:	1.97
•	Stanford University:	1.33
•	Northwestern University:	1.07
•	Iowa State University:	0.98

- 6/21 peer universities scored 0.00/4.00
- 10/21 peer universities scored <0.25/4.00

Description of Credit

This credit recognizes institutions promote sustainability through their investment decisions. This can be done through positive sustainability investment or investor engagement

Criteria

• An institution may either pursue positive sustainability investment or investor engagement

Positive Sustainability Investment

- Supports environmentally responsible practices and the development of sustainable products and services
- Institutions can invest in one or more of:
 - o Sustainable industries (renewable energy, sustainable forestry, etc.)
 - o Businesses that have been recognized for exemplary sustainability performance
 - Sustainability investment funds (any fund with a mission of investing in a sustainable sector or industry)
 - o Community development financial institutions (CDFI)
 - Socially responsible mutual funds with positive screens (businesses with exemplary environmental performances are selected)
 - O Green revolving loan funds that are funded from endowment

Investor Engagement

- Improves the sustainability performance of the businesses an institution invests in; aligns values with investments
- Institutions can have policies and/or practices that do one or more of:
 - o Have a publicly available sustainable investment policy
 - Use a sustainable investment policy to guide investment managers
 - Engage in proxy voting to promote sustainability (can be done through CIR or other committee)
 - File or co-file shareholder resolutions that address sustainability and/or submit letter(s) about social/environmental responsibility to a company in which an institution holds investments
 - Participate in a public divestment effort and/or have publicly available investment policy with negative screens (ex: prohibit investment in weapons manufacturing)
 - Engage in policy advocacy by participating in investor networks and/or engage in interorganizational collaborations to share best practices

Scoring

4 points: Total points are calculated by adding the points earned from part one (positive sustainability investment; 4 points available) and part two (investor engagement; 2 points available)

- Maximum points are earned by:
 - o Investing 30% of investment pool sustainably and meeting all six investor engagement criteria (listed in criteria section)
 - o Investing 60% of investment pool sustainably
- Incremental points are available for:
 - o Percentage of investment pool invested sustainably
 - o The number of investor engagement criteria met

Part One (4 points): Positive Sustainability Investment

- Percentage of investment pool that is sustainably invested (one or more of the positive sustainably investment criteria listed in criteria section)
- Maximum points are earned by investing 60% of investment pool sustainably
- Incremental points are available based on percentage

Factor	Multiply	Value of positive sustainability investments	Divide	Total value of the investment pool	Equals	Points earned under Option 1
6 3/3	×		÷		=	Up to 4

Part Two (2 points): Investor Engagement

- 0.33 points are earned for each investor engagement criteria that is met (six are available)
- Maximum points are earned by meeting all six investor engagement criteria
- Incremental points are available based on the number of criteria met

Changes from $v.2.1 \rightarrow v.2.2$

- Changing from $PA9 \rightarrow PA10$
- Changing from 4 credits \rightarrow 3-5 credits (based on value of investment pool)

Scoring

• Weighted more for institutions with large investment pools:

Total value of the investment pool (US/Canadian dollars)	Total points available for the credit	
\$1 billion or more	5	
\$500 - 999 million	4	
Less than \$500 million	3	

- Part One (3-5 points): Positive Sustainability Investment
 - o Same way of earning points as v2.1; only difference is the amount of points available

- A = Total points available for this credit (see above)
- B = Value of positive sustainability investments
- C = Total value of the investment pool
- Part Two (1.5-2.5 points): Investor Engagement
 - o Same way of earning points as v2.1; only difference is the amount of points available

Points earned in Part 2 =
$$(0.5 \times A) \times (B/6)$$

- A = Total points available for this credit (see above)
- B = Number of criteria met

University of Wisconsin-Oshkosh ----- 3.54/4.00

Positive Sustainability Investment:

- 53.13% of investment pool is invested in positive sustainability investments
 - o \$27.7 million investment pool
 - \$14.7 million in sustainable industries; since 2010, has invested in three sustainability-related projects:
 - Constructing a commercial scale dry fermentation anaerobic bio-digester (first in the Americas). Converts organic waste into biogas, which is burned to generate electricity
 - Constructing a wet anaerobic digester on WI's largest dairy farm in Rosendale (began operating in 2013)
 - Investing in hotel renovation project, which is centrally located along downtown riverfront development initiative (argues that a healthy downtown is important for a sustainable community)

University of Washington, Seattle ----- 3.05/4.00

Positive Sustainability Investment:

- 20.77% of investment pool is invested in positive sustainability investments
 - o \$3.36 billion investment pool
 - ~\$500 million in sustainable industries, ~\$185 million in businesses selected for exemplary sustainability performance, ~\$14 million in sustainability investment funds

Investor Engagement:

- Has publicly available sustainable investment policy
- Uses sustainable investment policy to select and guide investment managers
- Engages in proxy voting to promote sustainability
- Has publicly available investment policy with negative screens
 - Direct investment in companies doing business in Sudan whose business activities support the Sudan government is prohibited ³⁵
 - o Direct investment in tobacco companies is prohibited
 - Direct investment in coal companies whose principal business is the mining of coal for energy is prohibited
 - o % of endowment that negative screens apply to: 27%
- Engages in policy advocacy by participating in investor networks
- Meets 5/6 criteria

University of California, Berkeley ----- 3.05/4.00

Positive Sustainability Investment:

- 1.91% of investment pool in positive sustainability investments
 - o \$11.5 billion investment pool
 - o \$75 million in sustainable industries, \$145 million in sustainability investment funds

Investor Engagement:

• Meets 6/6 criteria

³⁵ Sudan government has continuously sponsored genocidal actions and human rights violations in Darfur

PA10: Investment Disclosure

Points: 1

 UW-Madison:
 0.00

 Peer Group:
 0.16

 Big 10:
 0.00

 UW-System:
 0.11

 Overall:
 0.10

Highest Scoring Universities from Peer Group:

•	University of California, Berkeley:	0.75	
•	University of California, Irvine:		0.75
•	University of California, San Diego:		0.75
•	University of Illinois at Chicago		0.75
•	University of Washington, Seattle	0.33	
•	Iowa State University		0.16

• 15/21 peer universities scored 0.00/1.00

Description of Credit

This credit recognizes institutions that make their investment holdings available to the public

Criteria

- An institution makes their investment holdings available by creating a snapshot, which includes the amount invested in each fund/company and proxy voting records
- Snapshot must be updated at least once per year

Scoring

I point: Scoring based on the percentage of investment pool make available, and the level of detail that is included

- Maximum points are earned by making an institution's entire investment holdings publicly available
- Incremental points are available based on the percentage of the investment pool that is included in the snapshot, and the level of detail disclosed

Level of detail disclosed	Factor	Multiply	Percentage of the total investment pool included in the public snapshot at each level of detail (0-100)	Equals	Points earned
Specific funds/companies and proxy voting record (if applicable)	0.01	×		=	
Specific funds/companies, but not proxy voting record	0.0075	×		=	
Investment managers and/or basic portfolio composition (i.e., asset classes), but not specific funds or companies	0	×		=	
Total points earned →					Up to 1

Changes from $v2.1 \rightarrow v2.2$

• Changing from $PA10 \rightarrow PA11$

University of Wisconsin-Madison 0.00/1.00
Does the institution make a snapshot of its investment holdings available to the public?: No
University of Illinois at Chicago 0.75/1.00
 100% of the investment pool is included in the snapshot of investment holdings Website where holdings snapshot is publicly available
• Engages in proxy voting, but chooses not to include it
University of Washington, Seattle 0.33/1.00
 44% of the investment pool is included in the snapshot of investment holdings Releases annual <u>Consolidated Endowment Fund (CEF) reports</u>

• Engages in proxy voting, but chooses not to include it

University of California, B/I/SD ----- 0.75/1.00

- 100% of the investment pool is included in the snapshot of investment holdings
 - o Publicly available holdings snapshot (for STARS submission)
 - o Endowment Investment Review as of June 30, 2019 (on website)
- Engages in proxy voting, but chooses not to include it
- 2015/2016 Document <u>Investing for the Long Term</u> (included with UC-Irvine's STARS submission)



PA11: Employee Compensation

Points: 3

UW-Madison :	1.29
Peer Group:	1.05
BIG 10:	1.42
UW System:	1.29
Overall:	0.90

Highest Scoring Universities from Peer Group:

•	Stanford University:	3.00
•	University of Michigan:	2.08
•	University of California – Irvine:	2.04
•	University of Illinois, Urbana-Champaign:	2.01
•	Pennsylvania State University:	1.94
•	University of Washington, Seattle:	1.92

• UW-Madison scored higher than 13/21 peer universities!!

Description of Credit

Recognizes institutions that ensure their lowest paid workers earn a living wage.

• "By providing employees with wages and benefits that are sufficient to meet basic needs, a university or college and its contractors can enfranchise the entire campus workforce so that each individual can contribute positively and productively to the community."

Determining the "Living Wage"

Living Wage Calculator run by the Massachusetts Institute of Technology

- Calculated using the living wage for **2 adults working adults with 2 children** for the community where the campus is located
- \$16.70 for UW-Madison

Scoring

Part of the credit	Points available for institutions without significant on-site contractors	Points available for institutions with significant on-site contractors
Part 1	1.5	0.75
Part 2	n/a	0.75
Part 3	1.5	1.5
Total points available	3	3

Part 1: More than 75 percent of university employees receive a living wage

• Includes all employees (part-time, full-time, temporary) with the choice of omitting student workers

Points Earned = **A** x [
$$(B - 75) / 25$$
]

A = Points available for part 1

 \mathbf{B} = Percentage of all employees that earn a living wage (0-100)

- Earns maximum points when 100% receive a living wave.
- Incremental points available for percentages between 75-100%

Part 2: More than 75 percent of university employees of significant contractors receive a living wage

- Contractors are present on-site as part of regular and ongoing campus operations. Contractors that work on-site on temporary basis may be excluded
- Examples include dining/catering, maintenance, cleaning/janitorial, grounds keeping, transportation, retail, etc.
- May also include employees of contractors covered by collective bargaining agreements (an example being union contracts)

Points Earned =
$$0.75 \times [(A - 75) / 25]$$

A = Percentage of employees of on-site contractors that earn a living wage or are covered by collective bargaining agreements

- Earns maximum points when 100% of these contractors receive living wage
- Incremental points available for percentages between 75-100%

Part 3: The total compensation of the university's lowest paid employee or pay grade meets or exceeds the local living wage

The total compensation provided to the institution's lowest paid regular employee or pay grade meets or exceeds:	Points earned
150 percent of the living wage	1.5
125 percent of the living wage	1.0
The local living wage	0.5

Changes from $2.1 \rightarrow 2.2$

- Changing from PA11 \rightarrow PA12
- Scoring for part 3 changes from version 2.1:

The total compensation provided to the institution's lowest paid regular employee or pay grade meets or exceeds:	Points earned
The local living wage	0.3
125 percent of the living wage	0.6
150 percent of the living wage	0.9
175 percent of the living wage	1.2
200 percent of the living wage	1.5

University of Wisconsin-Madison ----- 1.29/3.00

Local living wage: \$16.70

<u>Part 1</u>: 91.51% of all employees receive a living wage

• Scoring: 1.5 * [(91.51 - 75) / 25] = 0.99 points earned

<u>Part 2</u>: We **do not** have employees of contractors that work on-site as part of regular/ongoing campus operations

• Scoring: 0 points available/earned

<u>Part 3</u>: The total compensation provided to lowest paid regular employee or pay grade meets/exceeds **100%** of the living wage

• Scoring: **0.30 points earned** (look at table above)

Have we made a formal commitment to pay a living wage? Yes

• Committed to meeting/exceeding the City of Madison living wage for all employees. The city of Madison living wage is set at 110% of the poverty level for a family of four

Have we made a formal commitment to provide a living wage to student employees and/or graduate teaching/research assistants? **No**

Stanford University ----- 3.00/3.00

Local living wage: \$22.33

Part 1: 100% of all employees receive a living wage

• Scoring: 0.75 * [(100 - 75) / 25] = 0.75 points earned

<u>Part 2</u>: The University **does** have employees of contractors that work on-site as part of regular/ongoing campus operations. **100%** of these workers receive a living wage

• Scoring: 0.75 * [(100 - 75) / 25] = 0.75 points earned

<u>Part 3</u>: The total compensation provided to lowest paid regular employee or pay grade meets/exceeds **200%** of the living wage

• Scoring: **1.50 points earned** (look at table above)

Has the institution made a formal commitment to pay a living wage? Yes

Has the institution made a formal commitment to provide a living wage to student employees and/or graduate teaching/research assistants? **Yes**

University of Michigan ----- 2.08/3.00

Local living wage: \$15.92

Part 1: 94.59% of all employees receive a living wage

• Scoring: 1.5 * [(94.59 - 75) / 25] = 1.18 points earned

<u>Part 2</u>: The University **does not** have employees of contractors that work on-site as part of regular/ongoing campus operations.

• Scoring: 0 points available/earned

<u>Part 3</u>: The total compensation provided to lowest paid regular employee or pay grade meets/exceeds **150%** of the living wage

• Scoring: **0.90 points earned** (look at table above)

Has the institution made a formal commitment to pay a living wage? No

Has the institution made a formal commitment to provide a living wage to student employees and/or graduate teaching/research assistants? **No**

University of California, Irvine ----- 2.04/3.00

Local living wage: \$18.29

<u>Part 1</u>: **94.00%** of all employees receive a living wage

• Scoring: 1.5 * [(94.00 - 75) / 25] = 1.14 points earned

<u>Part 2</u>: The University **does not** have employees of contractors that work on-site as part of regular/ongoing campus operations.

• Scoring: 0 points available/earned

<u>Part 3</u>: The total compensation provided to lowest paid regular employee or pay grade meets/exceeds **150%** of the living wage

- Scoring: **0.90 points earned** (look at table above)
- All regular staff employees at UCI earn a minimum of \$15.00/hour in accordance with the UC Fair Wage/Fair Work Plan, which is 43% over the state minimum wage and 26% over the local city minimum wage. UCI provides a benefits package to the lowest paid employees worth \$13.12/hour.

Has the institution made a formal commitment to pay a living wage? Yes

Has the institution made a formal commitment to provide a living wage to student employees and/or graduate teaching/research assistants? **No**



PA12: Assessing Employee Satisfaction

Points: 1

 UW-Madison:
 0.63

 Peer Group:
 0.66

 BIG 10:
 0.83

 UW System:
 0.57

 Overall:
 0.56

Highest Scoring Universities from Peer Group:

- 11/21 peer universities scored 1.00
- UW-Madison scored higher than 9/21 peer universities

Credit Description

Recognizes institutions that conduct regular evaluations on the satisfaction and engagement of their employees. Most often done through surveys.

Criteria

- Evaluation is conducted institution-wide or by individual departments
- Feedback is anonymous
- Must include both staff and faculty
- Evaluation must addresses:
 - Job satisfaction
 - Learning and advancement opportunities
 - Work culture and work/life balance

Scoring

Maximum points are earned when all employees are covered by the criteria above. Incremental points are available based on the percentage of employees assessed.

If a **representative sample** is conducted, points are earned based on the total population from which the sample is drawn. If an assessment is representative of the entire population, the maximum points are earned. Incremental points are available based on the representative percentage.

• A **representative sample** is a subset of a statistical population that accurately reflects the members of the entire population

Changes from $2.1 \rightarrow 2.2$

University of Wisconsin-Madison ----- 0.63/1.00

Percentage of employees (staff and faculty) assessed: 63%

Three primary efforts of ours to assess employee satisfaction and engagement:

- 1. Women in Science & Engineering Leadership Institute Study of Faculty Work Life at UW-Madison
 - a. Addresses attitudes about department climate, hiring and promotion processes, and job satisfaction
 - b. Accomplished via postal survey, administered by the UW Survey Center
- 2. Academic Staff Work Life Survey
 - a. Addresses work life balance and identify factors that contribute to a positive workplace environment
 - b. Surveyed in Spring 2016, and again in 2019
- 3. Vice Chancellor for Finance and Administration (VCFA) Engagement, Inclusion and Diversity survey
 - a. Addresses work environment, relationship with co-workers, tools and opportunities, work unit, supervisor, and overall satisfaction
 - b. Developed to addresses campus priorities of recruiting/retaining best staff and faculty, as well as enhancing diversity
 - c. Administered to all VCFA employees every 2 years beginning in 2012

Stanford University----- 1.00/1.00

Percentage of employees (staff and faculty) assessed: 100%

2018 University-Wide Staff Engagement Survey

- One liaison per school was used as the primary point of contact. Liaisons guided the process, communicated with staff to encourage participation, and developed actions to improve the workplace after receiving the survey results.
- University HR managed the project while working with the liaisons to administer the survey and the results, as well as develop action plans based on the results
- Deployed both online and via paper
- Survey Results

An Affordability Task Force also administered a campus-wide survey in early 2019 to addresses affordability issues and topics such as housing, child care, transportation, and benefits

Faculty was assessed by the Faculty Quality of Life survey in early 2019

University of Texas at Austin ----- 1.00/1.00

Percentage of employees (staff and faculty) assessed: 100%

All non-teaching staff are provided an opportunity to respond to a professionally developed employee engagement survey that is administered by a third party

- Survey measures 14 areas that drive organization performance and engagement:
 - Supervision, Team, Quality, Pay, Benefits, Physical Environment, Strategic, Diversity, Information Systems, Internal Communication, External Communication, Employee Engagement, Employee Development, and Job Satisfaction.
- An Employee Engagement Survey Steering Committee was formed with representatives nominated from each College, School, and Administrative Unit (CSU) by their Dean or Vice President
- Survey Results and Summary

University of Washington, Seattle ------ 1.00/1.00

Percentage of employees (staff and faculty) assessed: 100%

Conducts employee satisfaction and engagement surveys periodically, but more frequently within individual departments and operational units

- Annually measure employee satisfaction through survey that asks staff to rank factors that make an exemplary organization
- The Transforming Administration Project (TAP) administers a campus-wide survey every other year to assess the needs of campus partners across all three campuses
 - Works to improve efforts on bringing administrative units together to work as one, with a common vision, culture, and commitment.
 - o Survey Results and Information

PA14: Workplace Health and Safety

Points: 2

UW-Madison:	0.75
Peer Group:	0.77
Big 10:	0.89
UW System:	1.01
Overall:	0.78

Highest Scoring Universities from Peer Group:

•	University of Illinois, Urbana-Champaign:	1.40
•	Northwestern University:	1.38
•	University of Washington, Seattle:	1.22
•	University of Michigan:	1.17
•	University of Utah:	1.08
•	Stanford University:	1.07
•	University of Virginia:	1.04

• UW scored higher than 10/21 peer universities

Credit Description

Recognizes institutions that help ensure the health and safety of their employees. This includes the reduction of **recordable workplace injuries** (**RWI**) and **occupational disease cases** (**ODC**)

Criteria and Scoring

Part 1 (1 point):

- Institution has a reduction in total number of RWI and ODC per full-time equivalent employee (FTE) compared to baseline
- Maximum points are earned when an institution has no RWI and ODC in the performance year
- Incremental points are available for improvement from a baseline

Points Earned =
$$1 \times \{ [(A/B) - (C/D)] / (A/B) \}$$

- A = Number of recordable workplace injuries and occupational disease cases, baseline year
- B = Full-time equivalent of employees, baseline year
- C= Number of recordable workplace injuries and occupational disease cases, performance year
- D= Full-time equivalent of employees, performance year

Part 2 (1 point):

- Institution has less than 6 RWI and ODC annually per 100 FTE employees
 - o This includes employees of contractors who work on-site
- Maximum points are earned when an institution has no RWI and ODC in the performance year.
- Incremental points are available for institutions which have 0-6 RWI and ODC per 100 FTE employees

Points Earned =
$$1 \times \{ [0.06 - (A/B)] / 0.06 \}$$

- A = Number of recordable workplace injuries and occupational disease cases, performance year
- Full-time equivalent of employees, performance year B=

Changes from $2.1 \rightarrow 2.2$

Part 1 (0.5 points): Health and Safety Management System

- Institution has an occupational health and safety management system (OHSMS)
 - o May use either a recognized standard/guideline or a custom management system
- Maximum points are earned for having OHSMS that uses a nationally or internationally recognized standard or guideline
- Partial points (0.25) are available for having a custom system

Part 2 (1.5 points): Incidents per FTE Employee

- Institution has less than 4 annual recordable incidents of work-related injury or ill health per 100 FTE employees
- Maximum points are earned for having 0 recordable incidents per 100 FTE employees
- Incremental points are available for institutions which have 0-4 of these incidents per 100 FTE employees

Points earned =
$$1.5 \times \{ [0.04 - (A/(B+C))] / 0.04 \}$$

- A = Annual number of recordable incidents of work-related injury or ill health
- B = Full-time equivalent of employees
 - C = Full-time equivalent of workers who are not employees but whose work and/or workplace is controlled by the institution (optional)

University of Wisconsin-Madison ----- 0.75/2.00

- Number of RWI and ODC / Number per FTE employee
 - o Baseline year: 437 / 0.03

(Baseline = FY13)

- o Performance year: 396 / 0.02
- Percent reduction in RWI and ODC per FTE from baseline: 11.95%
- Number of RWI and ODC per 100 FTE employees, performance year: 2.21

University of Illinois, Urbana-Champaign ----- 1.40/2.00

- Number of RWI and ODC / Number per FTE employee
 - o Baseline year: 486 / 0.03

(Baseline = FY09)

- o Performance year: 178 / 0.01
- o Percent reduction in RWI and ODC per FTE from baseline: 61.50%
- Number of RWI and ODC per 100 FTE employees, performance year: 1.28

University of Washington, Seattle ----- 1.22/2.00

- Number of RWI and ODC / Number per FTE employee
 - o Baseline year: 1480 / 0.04

(Baseline = FY05)

- o Performance year: 635 / 0.02
- o Percent reduction in RWI and ODC per FTE from baseline: 53.54%
- Number of RWI and ODC per 100 FTE employees, performance year: 1.89
- Health and safety programs/initiatives:
 - The UW Health and Safety Committee program encourages employees to be in one of the 10 Organizational Health and Safety Committees that represent the departments, facilities, and campuses
 - Monthly meetings discuss health and safety concerns, accident reports, safety initiatives, etc.
 - Many departments have safety teams or committees that are specific to a certain safety issue

Stanford University ----- 1.07/2.00

- Number of RWI and ODC / Number per FTE employee
 - o Baseline year: 481 / 0.04

(Baseline = 2005-2007)

- o Performance year: 366 / 0.02
- o Percent reduction in RWI and ODC per FTE from baseline: 46.28%
- Number of RWI and ODC per 100 FTE employees, performance year: 2.34
- The Stanford University Occupational Health Center (SUOHC) is a campus-based medical clinic that treats the occupational health needs of university employees. The SUOHC gives evaluation and treatment to work-related injuries and illnesses, as well as medical surveillance programs.

5.e. Recommendations and STARS Credits

STARS and Tit	Credit Number	Points available	UW- Madison Score	Minimum requirement	Integrate Sustainability	Center Social Sustainability	Recognize UW-Madison as a Leader	Establish a Distinctive Home	Champion Sustainability Research	Expand Sustainability Learning	Pursue Carbon Neutrality	Achieve Zero Waste	Plan and Design	Build and Operate
AC 1	Academic Courses	14	5.88	Conduct an inventory to identify sustainability course offerings.						X				
AC 2	Learning Outcomes	8	1.06	Have adopted one or more institution-level sustainability learning outcomes and/or have students graduate from degree programs that require an understanding of the concept of sustainability.						X				
AC 3	Undergraduate Program	3	3	Offer at least one sustainability-focused, undergraduate-level major, degree program, minor or concentration.										
AC 4	Graduate Program	3	3	Offer at least one sustainability-focused, graduate-level major, degree program, minor, concentration or certificate.										
AC 5	Immersive Experience	2	2	Offer at least one immersive, sustainability-focused educational study program.										
AC 6	Sustainability Literacy Assessment	4	0	Conduct an assessment of the sustainability literacy of the institution's students.						X				
AC 7	Incentives for Developing Courses	2	0	Have an ongoing program that offers incentives for academic staff to develop new sustainability courses and/or incorporate sustainability into existing courses or departments.						X				
AC 8	Campus as a Living Laboratory	4	4	Utilize the institution's infrastructure and operations as a living laboratory for applied student learning for sustainability.										
AC 9	Research and Scholarship	12	5.65	Conduct an inventory to identify the institution's sustainability research.					X					
AC 10	Support for Sustainability Research	4	3	Have programs to encourage and/or support sustainability research.				X	X					
AC 11	Open Access to Research	2	0	Facilitate open access publishing.										

STARS and Titl	Credit Number e	Points available	UW- Madison Score	Minimum requirement	Integrate Sustainability	Center Social Sustainability	Recognize UW-Madison as a Leader	Establish a Distinctive Home	Champion Sustainability Research	Expand Sustainability Learning	Pursue Carbon Neutrality	Achieve Zero Waste	Plan and Design	Build and Operate
EN 1	Student Educators Program	4	0.69	Coordinate an ongoing peer- to-peer sustainability outreach and education program for students.										
EN 2	Student Orientation	2	0	Include sustainability prominently in student orientation activities and programming.	X									
EN 3	Student Life	2	2	Have co-curricular sustainability programs and initiatives.						X				
EN 4	Outreach Materials and Publications	2	2	Produce outreach materials and/or publications that foster sustainability learning and knowledge.	X		X					X		
EN 5	Outreach Campaign	4	4	Hold at least one sustainability-related outreach campaign directed at students and/or employees.					7					
EN 6	Assessing Sustainability Culture	1	0	Conduct an assessment of campus sustainability culture that focuses on sustainability values, behaviors and beliefs.	X									
EN 7	Employee Educators Program	3	0.01	Administer or oversee an ongoing peer-to-peer sustainability outreach and education program for employees.										
EN 8	Employee Orientation	1	0.02	Cover sustainability topics in employee orientation and/or in outreach and guidance materials distributed to new employees.	X									
EN 9	Staff Professional Development and Training	2	0	Make available professional development and training opportunities in sustainability to non-academic staff.	X									
EN 10	Community Partnerships	3	3	Have at least one formal community partnership to work together to advance sustainability.			X				X	X		
EN 11	Inter-Campus Collaboration	3	2.5	Collaborate with other colleges and universities to support and help build the campus sustainability community.			X							

STARS and Titl	Credit Number	Points available	UW- Madison Score	Minimum requirement	Integrate Sustainability	Center Social Sustainability	Recognize UW-Madison as a Leader	Establish a Distinctive Home	Champion Sustainability Research	Expand Sustainability Learning	Pursue Carbon Neutrality	Achieve Zero Waste	Plan and Design	Build and Operate
EN 12	Continuing Education	5	0.55	Offer continuing education courses that address sustainability and/or have at least one sustainability-themed certificate program through a continuing education or extension department.	Sustamability	Sustamability	as a Leauer	Home	Research	Learning	Neutranty	Waste	Design	Орегате
EN 13	Community Service	5	2.59	Have data on student engagement in community service and/or a formal program to support employee volunteering.										
EN 14	Participation in Public Policy	2	2	Advocate for public policies that support campus sustainability or that otherwise advance sustainability.			X							
EN 15	Trademark Licensing	2	2	Have adopted a labor rights code of conduct in its licensing agreements with the licensees who produce its logo apparel.										
OP 1	Emissions Inventory and Disclosure	3	N/A New Credit	Have completed an inventory to quantify the institution's greenhouse gas (GHG) and/or air pollutant emissions.							X			
OP 2	Greenhouse Gas Emissions	8	4.16	Have completed an inventory to quantify the institution's Scope 1 and Scope 2 greenhouse gas (GHG) emissions.							X	X	X	X
OP 3	Building Design and Construction	3	0.63	Own new or renovated buildings that were designed and built in accordance with a published green building code, policy/guideline, or rating system.									X	
OP 4	Building Operations and Maintenance	5	0.01	Own buildings that are operated and maintained in accordance with a sustainable management policy/program or a green building rating system focused on the operations and maintenance of existing buildings.										X

STARS and Tit	Credit Number	Points available	UW- Madison Score	Minimum requirement	Integrate Sustainability	Center Social Sustainability	Recognize UW-Madison as a Leader	Establish a Distinctive Home	Champion Sustainability Research	Expand Sustainability Learning	Pursue Carbon Neutrality	Achieve Zero Waste	Plan and Design	Build and Operate
OP 5	Building Energy Efficiency	6	3.51	Have data on grid-purchased electricity, electricity from on-site renewables, utility-provided steam and hot water, and stationary fuels and other energy products.		Sustamability	as a Leauer	Trome	Research	Learning	X	Waste	X	X
OP 6	Clean and Renewable Energy	4	0.06	Support the development and use of clean and renewable energy sources.							X			
OP 7	Food and Beverage Purchasing	6	0.4	Purchase food and beverage products that are sustainably or ethically produced and/or plant-based.										
OP 8	Sustainable Dining	2	1.88	Have programs and initiatives to support sustainable food systems and minimize food waste.								X		
OP 9	Landscape Management	2	0	Manage grounds organically or in accordance with an Integrated Pest Management (IPM) program.							X		X	X
OP 10	Biodiversity	1-2	2	Have conducted an assessment to identify endangered and vulnerable species and/or areas of biodiversity importance on land owned or managed by the institution.							X		X	X
OP 11	Sustainable Procurement	3	2	Apply sustainability criteria when making procurement decisions.								X		
OP 12	Electronics Purchasing	1	0.99	Purchase environmentally and socially preferable electronic products.								X		
OP 13	Cleaning and Janitorial Purchasing	1	0.24	Purchase cleaning and janitorial paper products that meet multi-criteria sustainability standards.								X		
OP 14	Office Paper Purchasing	1	0.58	Purchase office paper with post-consumer recycled, agricultural residue, and/or Forest Stewardship Council (FSC) certified content.								X		
OP 15	Campus Fleet	1	0.05	Include vehicles that are hybrid, electric and/or alternatively fueled in the institution's motorized fleet.							X			
OP 16	Commute Modal Split	5	N/A New Credit	Conduct a survey to gather data about student and/or employee commuting behavior.							X			

STARS and Titl	Credit Number	Points available	UW- Madison Score	Minimum requirement	Integrate Sustainability	Center Social Sustainability	Recognize UW-Madison as a Leader	Establish a Distinctive Home	Champion Sustainability Research	Expand Sustainability	Pursue Carbon Neutrality	Achieve Zero Waste	Plan and Design	Build and
OP 17	Support for Sustainable Transportation	1	2	Have implemented strategies to encourage more sustainable modes of transportation and reduce the impact of student and employee commuting.	Sustamability	Sustamability	as a Leader	riome	Research	Learning	X	waste	Design	Operate
OP 18	Waste Minimization and Diversion	8	3.58	Have data on the weight of materials recycled, composted, donated/re-sold, and disposed in a landfill or incinerator.								X		
OP 19	Construction and Demolition Waste Diversion	1	0.59	Divert non-hazardous construction and demolition waste from the landfill and/or incinerator.								X		
OP 20	Hazardous Waste Management	1	1	Have strategies in place to 1) safely dispose of all hazardous, special, universal, and non-regulated chemical waste and minimize the presence of these materials on campus; and/or 2) recycle, reuse, and/or refurbish electronic waste.								X		
OP 21	Water Use	4-6	4.48	Have data on potable and non-potable water use.									X	X
OP 22	Rainwater Management	2	1	Use green infrastructure and low impact development (LID) practices to help mitigate stormwater run-off impacts and treat rainwater as a resource rather than as a waste product.							X		X	X
PA 1	Sustainability Coordination	1	1	Have at least one sustainability committee, office, and/or officer tasked by the administration or governing body to advise on and implement policies and programs related to sustainability on campus.	X			X						
PA 2	Sustainability Planning	4	2.5	Have a published plan that includes measurable sustainability objectives and/or include the integrated concept of sustainability in the institution's highest guiding document.	X						X		X	X

STARS and Tit	Credit Number le	Points available	UW- Madison Score	Minimum requirement	Integrate Sustainability	Center Social Sustainability	Recognize UW-Madison as a Leader	Establish a Distinctive Home	Champion Sustainability Research	Expand Sustainability Learning	Pursue Carbon Neutrality	Achieve Zero Waste	Plan and Design	Build and Operate
PA 3	Inclusive and Participatory Governance	3	1.5	Have formal participatory or shared governance bodies, include diverse stakeholders on the institution's highest governing body, and/or host or support a formal body through which external stakeholders have a regular voice in institutional decisions that affect them.	X									
PA 4	Reporting Assurance	1	N/A New Credit	Complete an assurance process that provides independent affirmation that the information in its current STARS report is reported in accordance with credit criteria.										
PA 5	Diversity and Equity Coordination	2	1.33	Have a diversity and equity committee, office and/or officer and/or make diversity trainings and activities available.		X								
PA 6	Assessing Diversity and Equity	1	1	Have engaged in a structured assessment process to improve diversity, equity, and inclusion on campus.		X								
PA 7	Support for Underrepresented Groups	3	1.92	Have policies, programs or initiatives to support underrepresented groups and foster a more diverse and inclusive campus community.		X								
PA 8	Affordability and Access	4	3.28	Have data related to the institution's accessibility and affordability to low-income students.		X								
PA 9	Committee on Investor Responsibility	2	0	Have a formally established and active committee on investor responsibility (CIR) or similar body.										
PA 10	Sustainable Investment	3-5	1-0	Make positive sustainability investments and/or have investor engagement policies and practices.										
PA 11	Investment Disclosure	1	0	Make a snapshot of investment holdings available to the public on at least an annual basis.										
PA 12	Employee Compensation	3	1.29	Have data on the hourly wages and total compensation provided to employees.										

			UW-				Recognize	Establish a	Champion	Expand	Pursue	Achieve		
STARS	Credit Number	Points	Madison		Integrate	Center Social	UW-Madison	Distinctive	Sustainability	Sustainability	Carbon	Zero	Plan and	Build and
and Tit	le	available	Score	Minimum requirement	Sustainability	Sustainability	as a Leader	Home	Research	Learning	Neutrality	Waste	Design	Operate
				Conduct a survey or other										
	Assessing			evaluation that allows for										
PA 13	Employee	1	0.63	anonymous feedback to										
	Satisfaction			measure employee										
				satisfaction and engagement.										
				Have a wellness and/or										
PA 14	Wellness	1	1	employee assistance program										
FA 14	Programs	1	1	and/or prohibit smoking										
				within all occupied buildings.										
				Have an occupational health										
	Workplace			and safety management										
PA 15	Health and	2	0.75	system (OHSMS) and/or data										
	Safety			on work-related injury or ill										
				health.				,						

Table 20. Recommendations and STARS Credits

5.f. Action Plans

Integrate Sustainability

While the Office of Sustainability (OS) has made notable progress in advancing sustainability programs in recent years, its current institutional organization and structure does not adhere to the Sustainability Initiative Task Force's recommendation from 2010, which stated that the OS should "report directly in the chain of command to the provost and vice chancellor for administration." As such, there remains no upper leadership position focused on institutional sustainability at UW–Madison. Likewise, UW–Madison lacks the consistent inclusion of sustainability in senior leadership communications and in strategic, campus-wide decision making. The Integrate Sustainability action group addresses these gaps by working toward consistent structures and institutional support for sustainability at the institution. Embedding sustainability into the culture of UW–Madison in both top-down and bottom-up capacities will create buy-in across the organization and empower stakeholder groups to come together and work collaboratively to address sustainability challenges.

Related STARS³⁷ Credit(s)

- EN-2: Student Orientation
- EN-4: Outreach Materials and Publications
- EN-6: Assessing Sustainability Culture
- EN-8: Employee Orientation
- EN-9: Staff Professional Development and Training
- PA-1: Sustainability Coordination
- PA-2: Sustainability Planning
- PA-3: Inclusive and Participatory Governance

Relevant Initiatives

• 2020-2025 Strategic Framework³⁸

Peer Best Practices

• Pennsylvania State University: As of Fall 2020, nine of Penn State's 13 colleges, plus University Libraries and the Medical School, have established college sustainability Councils. Each Council is led by a Chair (who is appointed by the Dean in the case of colleges), and includes faculty, staff and student representation. Each Council develops its own charter. This decentralized structure is designed to encourage ownership of sustainability within the units and allow them each to determine their own unique contributions. The Sustainability Institute convenes the Council Chairs twice each semester for facilitated discussion and idea exchange, and encourages them to function as a peer network. The remaining colleges, and other non-academic units, are each encouraged to establish a similar structure.³⁹

The Sustainable Operations Council includes leaders of Finance & Business (F&B) units, Intercollegiate Athletics, and Hershey Medical Center. The Council structure facilitates interaction among F&B units, and between the units and the Sustainability Institute, to create a more comprehensive, coordinated, and strategic approach to decision-making and initiatives in the sustainability realm.⁴⁰ The Penn State Student Sustainability Advisory Council (SSAC)

³⁶ https://dbmfwipzwwbdx.cloudfront.net/wp-content/uploads/sites/29/2017/03/sustainability_taskforce-report_10oct2010_web1.pdf, p.15.

³⁷ https://stars.aashe.org/resources-support/technical-manual/

³⁸ https://strategicframework.wisc.edu/

³⁹ https://sustainability.psu.edu/campus-efforts/sustainability-councils/college-councils/

⁴⁰ https://sustainability.psu.edu/campus-efforts/sustainability-councils/sustainable-operations-council/

- provides consultation and advice on Penn State sustainability planning, programs, and initiatives. The SSAC meets bi-monthly for discussions and planning. The SSAC is comprised of student leaders, appointed by the President, with experience and interest in studying, advancing, and promoting sustainability.⁴¹
- Stanford University: The Office of Sustainability connects campus organizations and entities and works collaboratively with them to steer sustainability initiatives to fulfill Stanford's vision that sustainability will be a core value in everything it does. The Office works on long-range sustainability analysis and planning, evaluations and reporting, communication and outreach, academic integration, conservation behavior and training, sustainability governance strategy, and business systems. 42
- University of California, Berkeley: The purpose of the Chancellor's Advisory Committee on Sustainability (CACS), which first met in October 2003, is to promote environmental management and sustainable development at UC Berkeley. The Committee is charged with advising the Chancellor on matters pertaining to the environment and sustainability as it directly relates to UC Berkeley. To fulfill this obligation, CACS draws strength from its diverse composition of faculty, staff, students and alumni. The mission of the Committee is composed of three central goals: (1) to engage the campus in an ongoing dialogue about reaching environmental sustainability, (2) to integrate environmental sustainability with existing campus programs in education, research, operations, and public service, (3) to instill a culture of sustainable long-range planning and forward-thinking design.⁴³
- **Pennsylvania State University**: The Sustainable Operations Council includes leaders of Finance & Business (F&B) units, Intercollegiate Athletics, and Hershey Medical Center. The Council structure facilitates interaction among F&B units, and between the units and the Sustainability Institute, to create a more comprehensive, coordinated, and strategic approach to decision-making and initiatives in the sustainability realm. ⁴⁴ The Penn State Student Sustainability Advisory Council (SSAC) provides consultation and advice on Penn State sustainability planning, programs, and initiatives. The SSAC meets bi-monthly for discussions and planning. The SSAC is comprised of student leaders, appointed by the President, with experience and interest in studying, advancing, and promoting sustainability. ⁴⁵
- University of North Carolina at Chapel Hill: The University Sustainability Council helps align sustainability efforts across the University, evaluate our progress towards the Three Zeros goals and administer sustainability grants. It also advises the chancellor on action plans to make Carolina greener and makes recommendations for our path toward realizing the goals of the Three Zeros Environmental Initiative. The Three Zeros Initiative is Carolina's integrated approach to reducing its environmental footprint through three sustainability goals: net zero water usage; zero waste to landfills; and net zero greenhouse gas emissions.⁴⁶

Primary	Secondary
Office of Sustainability	Athletics
	Chancellor's Office
	Faculty Experts as Appropriate

⁴¹ https://sites.psu.edu/ssac/

⁴² https://reports.aashe.org/institutions/stanford-university-ca/report/2019-02-22/PA/coordination-planning/PA-1/

⁴³ https://reports.aashe.org/institutions/university-of-california-berkeley-ca/report/2018-08-16/PA/coordination-planning/PA-1/

⁴⁴ https://sustainability.psu.edu/campus-efforts/sustainability-councils/sustainable-operations-council/

⁴⁵ https://sites.psu.edu/ssac/

⁴⁶ https://reports.aashe.org/institutions/university-of-north-carolina-chapel-hill-nc/report/2020-12-

^{23/}PA/coordination-planning/PA-1/

Student Affairs
Finance and Administration - HR
Nelson Institute
Student Subcommittee Members
University Relations

Sequence	Program / Project	Primary Implementation	Status	Cost	FTE	Timeframe	Stakeholder Readiness
1a	Implement a continuity plan for the SAC and the Student Subcommittee	Office of Sustainability	In Progress	\$	*	Short	©
1b	Develop criteria and process for selection of, and organize celebration for, sustainability recognition and award recipients (individuals or teams)	Chancellor's Office	Not Started	\$	*	Short	
1c	Deliver survey to students, faculty, and staff assessing UW-Madison's sustainability culture	Office of Sustainability	In Progress	\$	*	Short	©
1d	Institutional structures and/or staffing to advance the priorities defined by the SAC	Finance and Administration / Nelson Institute	In Progress	\$	**	Medium	<u> </u>
2a	Develop and deliver regular schools / college / division / department (S/C/D) level sustainability progress reports and workshops	Office of Sustainability	In Progress	\$	**	Medium	(2)
2b	Design and implement processes to ensure consideration of the priorities defined by the SAC in strategic decision-making	Chancellor's Office	Not Started	\$	**	Medium	(2)
2c	Delivery sustainability orientation presentation during SOAR, graduate student orientation, and employee onboarding	Student Affairs / Finance and Administration – HR	In Progress	\$	**	Medium	<u> </u>
3a	Hold a Sustainability Forum to share and discuss issues in sustainability	Office of Sustainability	Not Started	\$\$	**	Medium	©
3b	Include sustainability as a topic area in the annual events (e.g., diversity forum, women and leadership series, showcase, etc.)	Office of Sustainability	Not Started	\$	*	Medium	(1)
3c	Develop a sustainability plan for Athletics operations, events, and communications including incorporation of sustainability themes in public events and promotional materials	Athletics	Not Started	\$	*	Medium	(:)

Sequence	Program / Project	Primary Implementation	Status	Cost	FTE	Timeframe	Stakeholder Readiness
3b	Implement a coordinated approach to internal sustainability communications that encompasses the breadth of campus and involves a variety of communicators	University Relations	Not Started	\$	*	Medium	(:)
3e	Provide sustainability training and professional development courses for faculty/staff	Finance and Administration – HR	Not Started	\$	**	Medium	(:)
4	Implement evaluation and implementation processes to ensure alignment of sustainability related policies, planning, and strategic decisions with enterprise-wide priorities	Chancellor's Office	Not Started	\$	**	Long	<u>:</u>

Table 21. Integrate Sustainability – Action Items Analysis

- TBD: Sustainability culture survey results
- Number of S/C/D sustainability progress reports delivered
- Number of workshops with S/C/Ds to discuss opportunities to advance sustainability
- Number of sustainability related events
- Percentage of entering students provided orientation activities and programming that include sustainability
- Percentage of new employees offered orientation and/or outreach and guidance materials that cover sustainability
- Percentage of staff who have attended at least one sustainability training supported by UW-Madison

Center Social Sustainability in all Programs to Support Diversity, Equity, Inclusion, and Access

From the differential impacts of environmental toxification to the race- and class-based distribution of food deserts, the historical legacy and persistence of discrimination is a profound barrier to the promise of sustainability. That legacy of discrimination scaffolds the existence of UW–Madison, which was built in the wake of the cultural erasure and genocide of the indigenous communities who lived on this land. UW–Madison cannot truly advance sustainability without advancing social justice and equity. At the same time, UW–Madison cannot deliver on the promise of a world-class education if its doors are not open to all regardless of financial ability. The Center Social Sustainability action group will address programs that center diversity, equity, inclusion, and access across campus.

Related STARS⁴⁷ Credit(s)

- PA-5: Diversity and Equity Coordination
- PA-6: Assessing Diversity and Equity
- PA-7: Support for Underrepresented Groups
- PA-8: Affordability and Access

Relevant Initiatives

- 2020-2025 Strategic Framework⁴⁸
- Diversity Framework⁴⁹

Peer Best Practices

- Northwestern University: The Office of Institutional Diversity is tasked with creating and sustaining a diverse, inclusive and welcoming environment for all Northwestern community members including students, faculty, staff and alumni. The Native American and Indigenous Peoples Steering Group advisory's purpose is to help support and ensure the success of Native American and Indigenous diversity, equity and inclusion efforts across schools and units at the University. The Multicultural Alumni Council engaged alumni in diversity, equity and inclusion efforts across the University. Its objectives are to: 1) to enhance awareness of ongoing work to address needs of multicultural students. Faculty and staff, 2) To strengthen involvement of national alumni clubs in institutional efforts, and 3) To explore partnerships among national alumni clubs and the Office.⁵⁰
- University of California, Berkeley: The Centers for Educational Justice & Community Engagement (EJCE) at UC Berkeley is a collaborative of offices and centers that advocate for, build capacity with and dialogue among and across diverse communities. Our community engagement approach enriches the academic success of students while fostering a campus climate that honors the dignity of all people. Each partner space is steeped in rich and vibrant legacies and established community-centered praxes of educational justice: leadership development, access, activism, academic excellence and social justice. Our work reflects interconnected identities and experiences through our collective and individual commitments to support and advance future global leaders. Several EJCE offices have programs specifically designed to recruit students from underrepresented groups: African American Student Development; Asian Pacific American

⁴⁷ https://stars.aashe.org/resources-support/technical-manual/

⁴⁸ https://strategicframework.wisc.edu/

⁴⁹ https://diversity.wisc.edu/framework/

 $^{^{50}\} https://reports.aashe.org/institutions/northwestern-university-il/report/2020-03-06/PA/diversity-affordability/PA-5/$

- Student Development; Chicanx Latinx Student Development; Gender Equity Resource Center; Multicultural Community Center; Native American Student Development⁵¹
- Stanford University: The Diversity and First Gen office has also developed a new workshop in partnership with Residential Education entitled, "Beyond the Line" (BTL). The goal of Beyond the Line is authentic engagement across differences. Through responding to a series of statements, participants engage in deliberate dialogue and discussion on issues of critical importance. The statements included in BTL aim to dig deeper into contentious identity-based topics at Stanford, supporting all participants in actively listening and engaging with different viewpoints. In giving participants the tools to listen and acknowledge their own preconceived assumptions about others, BTL equips them to interrogate their own experiences and engage new perspectives and ideas. Beyond the Line has been held with a wide range of students, staff and faculty including ResEd professional staff, executive groups, all RAs and Row House staff, Resident Fellows (faculty), and other student and staff groups. Staff and students are also able to undergo Beyond the Line Facilitator training.⁵²

Primary	Secondary
Office of Sustainability	• DDEEA
	 Faculty Experts as Appropriate
	• Finance and Administration - Business
	Services
	Native Nations_UW
	• Student Subcommittee Members
	Wisconsin Foundation and Alumni Association

 $^{^{51}\} https://reports.aashe.org/institutions/university-of-california-berkeley-ca/report/2021-03-04/PA/diversity-affordability/PA-7/$

⁵² https://reports.aashe.org/institutions/stanford-university-ca/report/2019-02-22/PA/diversity-affordability/PA-4/

Sequence	Program / Project	Primary Implementation	Status	Cost	FTE	Timeframe	Stakeholder Readiness
1a	Align sustainability efforts with goals of Native Nations_UW and DDEEA	Office of Sustainability	In Progress	\$	**	Short	\odot
1b	Implement processes to ensure that equity, inclusivity, and justice are core to all programs that advance sustainability and resilience	Office of Sustainability	In Progress	\$	**	Short	©
1c	Staff to support social sustainability projects and coordination	Office of Sustainability	Not Started	\$	***	Medium	:
2a	Support equity and diversity through procurement processes that preference minority and women owned business	Finance and Administration - Business Services	Not Started	\$	*	Medium	©
2b	Greater transparency sustainability and equity in UW-Madison's supply chain	Finance and Administration - Business Services	Not Started	\$\$	**	Medium	(E)
3	Greater transparency in investment portfolios	Wisconsin Foundation and Alumni Association	Not Started	\$	**	Medium	8

Table 22. Center Social Sustainability in all Programs to Support Diversity, Equity, and Inclusion – Action Items Analysis

• Percent of sustainability projects including a diversity, equity, inclusion and access evaluation

Recognize UW-Madison as a Leader in Sustainability

At the institutional level, UW-Madison has taken limited responsibility for direct advocacy efforts toward sustainability-related public policy issues. Furthermore, the university has not made it a practice to lead regional or national sustainability initiatives in higher education. Yet such forms of community and regional problem-solving are fundamental to sustainability. This action group will help UW-Madison to engage with community members and organizations in the governmental, nonprofit, and for-profit sectors in order to solve our shared sustainability challenges.

Related STARS⁵³ Credit(s)

- EN-4: Outreach Materials and Publications
- EN-10: Community Partnerships
- EN-11: Inter-Campus Collaboration
- EN-14: Participation in Public Policy

Relevant Initiatives

- 2020-2025 Strategic Framework⁵⁴
- UW-Madison Civic Action Plan⁵⁵

Peer Best Practices

- University of Illinois, Urbana-Champaign: The University of Illinois System Office of Governmental Relations coordinates and documents the University of Illinois' efforts at lobbying for state and federal policies. In the past year, the University of Illinois has specifically supported efforts toward sustainable energy and agriculture policies, among many other efforts. Additionally, the university has joined several "Dear Colleague" letters related to sustainable topics. UIUC System President Timothy Killeen, on behalf of the University, has reiterated our institutional commitment to the Paris Accord and combating climate change numerous times, including in a high-profile public statement following the United States' own withdrawal. 56
- **Pennsylvania State University**: In 2017 Penn State signed an open letter ("We Are Still In") to the international community that affirmed the University's support for efforts to follow through with targets outlined in the Paris Agreement to address climate change and reduce greenhouse gas emissions on a global scale. Penn State has engaged state governments on the following issues which promote sustainability:
 - o Funding for agricultural research and extension
 - o Funding for energy efficient building research
 - Legislation regarding green buildings
 - Advocated for clean energy policies
 - Hosted a series of webinars for the PA GreenGov Council in support of the Commonwealth's progress toward sustainability goals set forth in the Governor's Executive Order 2019-01
 - Advocated to promote more affordable educational opportunities for students across the Commonwealth.

⁵³ https://stars.aashe.org/resources-support/technical-manual/

⁵⁴ https://strategicframework.wisc.edu/

⁵⁵ https://morgridge.wisc.edu/about/civic-action-plan/

 $^{^{56}\} https://reports.aashe.org/institutions/university-of-illinois-urbana-champaign-il/report/2019-02-27/EN/public-engagement/EN-14/$

- Engaged with state elected officials to highlight the University's efforts to reduce greenhouse gas emissions though a large solar Power Purchase Agreement (PPA).⁵⁷
- The Ohio State University: The Ohio State University has repeatedly requested the Ohio General Assembly to address the state's unscientific, restrictive wind energy development setback provisions. The setback provisions significantly deter new wind energy capacity from coming online within Ohio, which continues to impede the university's potential ability to access this renewable energy source for its operations. In addition, in 2017, Ohio State successfully lobbied the Ohio General Assembly to pass legislation that enables Ohio State to enter into a special purpose contract for our comprehensive energy management partnership that would not inadvertently trigger regulatory obligations from the Ohio Public Utilities Commission that could impede sustainable energy innovation on our campus.⁵⁸

Primary	Secondary
Office of Sustainability	Chancellor's Office
	 Faculty Experts as Appropriate
	Student Affairs - CFLI
	• Student Subcommittee Members
	University Relations
	Wisconsin Foundation and Alumni Association

⁵⁷ https://reports.aashe.org/institutions/pennsylvania-state-university-pa/report/2020-12-17/EN/public-engagement/EN-14/

⁵⁸ https://reports.aashe.org/institutions/the-ohio-state-university-oh/report/2019-01-18/EN/public-engagement/EN-14/

Sequence	Program / Project	Primary Implementation	Status	Cost	FTE	Timeframe	Stakeholder Readiness
1a	Advise the State's Office of Sustainability and Clean Energy and Department of Administration on impacts of sustainability policies on UW-Madison and UW System	Office of Sustainability	In Progress	\$	*	Short	©
1b	Develop sustainability focused alumni programing that spotlights alumni, faculty, or connect students with alumni	Wisconsin Foundation and Alumni Association	Not Started	\$	*	Short	©
1c	Engage external advisory boards on sustainability priorities (e.g., Unions, WFAA, etc.)	Office of Sustainability	In Progress	\$	*	Short	©
2a	Develop resources for supporting student sustainability advocacy (e.g., mentoring, presentation reviews, etc.)	Student Affairs – CFLI	Not Started	\$\$	**	Medium	<u></u>
2b	Expand collaborations across the UW-System and Big10 to share best practices, provide leadership to address policy barriers, and implement regional sustainability initiatives	Office of Sustainability	In Progress	\$\$	**	Medium	©
2c	Lead partnerships with other institutes of higher education that connects student sustainability leaders to share best practices and enable collaboration	Office of Sustainability	Not Started	\$	**	Medium	©
3	Incorporate a theme of sustainability into external communications	University Relations	Not Started	\$	*	Medium	:

Table 23. Recognize UW-Madison as a Leader – Action Items Analysis

- Percentage of students completing at least one sustainability advocacy training
- Number of sustainability related events featuring or including alumni

Establish a Distinctive Home for Sustainability Research, Education, and Operations

Many departments at UW–Madison offer sustainability courses,⁵⁹ pursue sustainability research,⁶⁰ or support sustainability operations,⁶¹ including the Office of Sustainability. Yet UW–Madison lacks a central body and physical location for students, staff, and faculty working towards sustainability to come together, build community, and disseminate sustainability practices across the institution. Other peer institutions have, in contrast, made this investment and accordingly have established themselves as destinations for faculty, students, and staff in the field. A Sustainability Institute could serve this vital function while also being an externally recognizable destination for fund raising.

Related STARS⁶² Credit(s)

- AC-10: Support for Sustainability Research
- PA-1: Sustainability Coordination

Relevant Initiatives

TBD

Peer Best Practices

- Pennsylvania State University: The Sustainability Institute supports the sustainability movement at Penn State as consultants and coaches who guide and bolster sustainability efforts at the University. The Sustainability Institute staff has expertise in a number of areas, including student and staff engagement, curriculum development, student-community projects, operations, research, and more. However, for sustainability to grow, the charge of creating sustainability must be adopted by the units and colleges via the establishment of Sustainability Councils at the unit, college and campus level. This way, sustainability grows organically. As it grows it is nurtured by the Sustainability Institute.⁶³
- University of Michigan: The Graham Institute catalyzes and facilitates sustainability-focused collaborations involving faculty, students, and external stakeholders. The institute links knowledge to real-world impact by supporting collaborative teams spanning multiple topics, disciplines, and sectors.⁶⁴
- University of Illinois Urbana-Champaign: The Institute for Sustainability, Energy, and Environment is purposed to find solutions for the ever-growing demand for food, water, and energy while ensuring a safe, productive, and sustainable environment for all global citizens. The Institute's three-pronged approach research, campus sustainability, and education and outreach was created to do just that. The overarching goal: to become a global model of sustainability by creating effective, positive change.⁶⁵

Primary	Secondary
Chancellor's Office	Academic Affairs
	Faculty Experts as Appropriate

⁵⁹ https://reports.aashe.org/institutions/university-of-wisconsin-madison-wi/report/2019-08-01/AC/curriculum/AC-1/

⁶⁰ https://reports.aashe.org/institutions/university-of-wisconsin-madison-wi/report/2019-08-01/AC/research/AC-9/

⁶¹ https://reports.aashe.org/institutions/university-of-wisconsin-madison-wi/report/2019-08-01/PA/coordination-planning/PA-1/

⁶² https://stars.aashe.org/resources-support/technical-manual/

⁶³ https://sustainability.psu.edu/about-us/about-the-institute/

⁶⁴ http://graham.umich.edu/about

⁶⁵ https://sustainability.illinois.edu/about/

Office of Sustainability
Student Subcommittee Members
Wisconsin Foundation and Alumni Association

Sequence	Initiative	Primary Implementation	Status	Cost	FTE	Timeframe	Stakeholder Readiness
1	Develop a plan for a sustainability hub, seeking consensus from stakeholders and how to align with centers, institutes, athletics, student affairs, university relations, and other administrative functions	Chancellor's Office	Not Started	\$	**	Short	(i)
2a	Identify and source funding for a hub	Chancellor's Office	Not Started	\$\$\$	*	Medium	<u>:</u>
2b	Engage alumni as donors to sustainability initiatives (including developing a hub)	Wisconsin Foundation and Alumni Association	Not Started	\$	**	Medium	:
3	Identify and engage faculty to align with a sustainability hub	Academic Affairs	Not Started	\$	*	Medium	©

Table 24. Establish a Distinctive Home for Sustainability Research, Education, and Operations – Action Items Analysis

- Funding (in dollars) raised to support Sustainability Hub
- Number of faculty aligned with Sustainability Hub

Champion Sustainability Research

Despite generating over \$450 million in funding for sustainability-related research in fiscal year 2020, 66 UW–Madison lacks established systems to consistently identify and track sustainability-related research. Moreover, UW–Madison lacks incentives for faculty and/or staff to pursue sustainability-related research. By creating systems for tracking, reporting, and incentivizing such research, this action group will help UW–Madison continue to solve sustainability challenges and develop new technologies, strategies, and approaches to address those challenges.

Related STARS⁶⁷ Credit(s)

- AC-9: Research and Scholarship
- AC-10: Support for Sustainability Research

Relevant Initiatives

• 2020-2025 Strategic Framework⁶⁸

Peer Best Practices

- **Pennsylvania State University**: The Sustainability Institute sponsors/hosts a faculty Scholar-in-Residence, whose role is to organize a research symposium on a selected sustainability topic (in 2021, Biodiversity) to encourage the formation of inter-/trans-disciplinary research teams, the symposium is followed by a seed grant competition on the same topic.⁶⁹
- **University of Michigan**: Over 13% of faculty and 87% of academic departments participate in sustainability-related research⁷⁰; tracking is completed by the development and maintenance of an expert's database.⁷¹
- University of Illinois at Chicago: UIC's Institute for Environmental Sciences and Policy provides seed funding to faculty research clusters interested in doing sustainability research; the mini-grant provides seed funding to faculty research teams wishing to jointly explore a research theme or a portfolio of research projects that will over time develop into full research proposals for external funding.⁷²

 $^{^{66}\} https://dbmfwipzwwbdx.cloudfront.net/wp-content/uploads/sites/29/2020/09/Sustainability-Report-2020_Final.pdf$

⁶⁷ https://stars.aashe.org/resources-support/technical-manual/

⁶⁸ https://strategicframework.wisc.edu/

⁶⁹ https://reports.aashe.org/institutions/pennsylvania-state-university-pa/report/2020-12-17/AC/research/AC-10/

⁷⁰ https://reports.aashe.org/institutions/university-of-michigan-mi/report/2018-06-25/AC/research/AC-9/

⁷¹ http://graham.umich.edu/experts

⁷² https://reports.aashe.org/institutions/university-of-illinois-chicago-il/report/2018-07-17/AC/research/AC-10/

Primary	Secondary
VCRGE	Academic Affairs
	Academic Affairs - APIR
	 Faculty Experts as Appropriate
	Office of Sustainability
	Student Subcommittee Members
	University Relations

Sequence	Program / Project	Primary Implementation	Status	Cost	FTE	Timeframe	Stakeholder Readiness
1a	Establish criteria that define sustainability- related research	Academic Affairs – APIR / VCRGE	In Progress	\$	**	Short	\odot
1b	Develop best practices and resources for conducting research sustainably	VCRGE	In Progress	\$	*	Short	\odot
1c	Define processes to track and report sustainability-related research	VCRGE	In Progress	\$	*	Medium	<u></u>
1d	Develop an inventory of campus resources and operations experts and processes for facilitating and executing campus as a living lab research	Office of Sustainability	In Progress	\$	**	Short	(3)
2	Develop a sustainability research communications strategy	University Relations	Not Started	\$	**	Short	©
3a	Create faculty and staff incentives for engaging in sustainability-related research	VCRGE	Not Started	\$\$	*	Long	:
3b	Submit a cluster hire proposal for three sustainability faculty members: one each in environmental, social, and economic	VCRGE	Not Started	\$\$\$	*	Long	
3c	Include additional resources in faculty start-up packages contingent on faculty engaging in sustainability research	Academic Affairs	Not Started	\$\$	*	Long	<u> </u>
3d	Develop sustainability research grants through WARF	VCRGE	Not Started	\$\$\$	*	Long	:

Table 25. Promote Sustainability Research – Action Items Analysis

- Percent of faculty engaged in sustainability-related research
- Percent of Academic Departments with at least one faculty engaged in sustainability-related research
- Funding (in dollars) generated for sustainability-related research
- Funding (in dollars) through internal grants available to support sustainability-related research

Expand Sustainability Learning

While UW–Madison offers over 248 courses from 79 departments that address sustainability⁷³, faculty and staff are still missing opportunities to offer courses that relate to sustainability in degree programs, in certificates, and in courses that fulfill general education requirements. Furthermore, UW–Madison lacks incentives for faculty and staff to incorporate sustainability issues into their courses. Integrating sustainability concepts throughout the curriculum will prepare students to apply sustainability principles in their professional fields. Meanwhile, ensuring that sustainability courses and content are offered by numerous departments helps ensure that the institution's approach to sustainability education is comprehensive and includes diverse topics.

Programs and initiatives outside of the formal classroom also help disseminate sustainability concepts and a sustainability ethic throughout the campus community. Despite the presence of such programs, UW—Madison lacks both dedicated personnel to develop and coordinate sustainability-related co-curricular learning opportunities, and also a method to connect these opportunities to foster growth and collaboration. Expanding and formalizing management of these programs will further engage students by integrating sustainability into their lives, experiential learning experiences, and campus culture. This action group will work to expanding both formal and informal methods of teaching and learning about sustainability.

Related STARS⁷⁴ Credit(s)

- AC-1: Academic Courses
- AC-2: Learning Outcomes
- AC-6: Sustainability Literacy Assessment
- AC-7: Incentives for Developing Courses
- EN-3: Student Life

Relevant Initiatives

- Thinking Forward Together (Wisconsin Union)⁷⁵
- CFLI Strategic Priorities⁷⁶
- The Wisconsin Experience⁷⁷

Peer Best Practices

• Pennsylvania State University: The Sustainability Institute provides funding for a full-time Academic Programs Manager (APM) whose primary role is to encourage and help faculty to integrate sustainability into their courses. Over the last three years, the APM has provided support for curricular or co-curricular program development in each of University Park's thirteen colleges. Examples include (1) conducted audits of sustainability curriculum content in three colleges/schools; (2) provided one-on-one consulting or in-person or virtual lectures to dozens of faculty members in over five academic departments; (3) cooperated with the Palmer Museum of Art and Center for Performing Arts to coordinate teaching with exhibitions and performances, including through grant opportunities provided by the Mellon Foundation. ⁷⁸

⁷³ https://reports.aashe.org/institutions/university-of-wisconsin-madison-wi/report/2019-08-01/AC/curriculum/AC-1/

⁷⁴ https://stars.aashe.org/resources-support/technical-manual/

⁷⁵ https://union.wisc.edu/about/strategic-thinking/

⁷⁶ https://cfli.wisc.edu/wp-content/uploads/sites/167/2017/05/CfLI-Strategic-Priorities-FY-17-19.pdf

⁷⁷ https://wisconsinexperience.wisc.edu/about/

⁷⁸ https://reports.aashe.org/institutions/pennsylvania-state-university-pa/report/2020-12-17/AC/curriculum/AC-7/

- **University of Colorado Boulder**: Over 25% of courses offered include Sustainability topics and these courses are offered across all academic departments.⁷⁹
- University of Illinois Urbana-Champaign: The Levenick iSEE Teaching Sustainability Fellowship Program offers an opportunity for faculty and instructors across campus to join a cohort of peers in a yearlong program to develop, implement, and evaluate their new course offerings in sustainability. All faculty participants receive \$1,000 \$2,000 as a stipend for participation.⁸⁰
- University of Iowa: Herky C.A.R.E.S. is a collaboration project between students and faculty to promote social and environmental justice in the university residence halls. There are 10 residence halls covered per year. The program involves training students and faculty in sustainability and environmental justice concepts and hosting a number of events to include students living in residence halls. Examples of events includes Earth Day celebrations, energy bowl competition, and celebrating cultural diversity festival.⁸¹
- Cornell University: Cornell's original "EcoRep" educators program offers 3 academic credits for students to lead peer-to-peer education initiatives on campus. This course, ALS 2000: Leadership for Sustainability, trains students to develop and implement outreach and behavior change interventions focused on reducing energy in residential communities and lab buildings on campus. The course is co-taught by instructors from the Campus Sustainability Office, the Cornell Team and Leadership Center, and the Cornell Institute for Climate Smart Solutions. 82
- University of Washington, Seattle: SEED's (Students Expressing Environmental Dedication) mission is to promote environmentally sound practices in the residence and dining halls among residents, along with raising awareness about environmental issues that affect students on both local and global scales. SEED organizes a wide variety of events and campaigns relating to sustainability. We also provide the opportunity for leadership development through our project committees and we offer volunteering opportunities within the club and other environmental organizations on and off campus.⁸³

 $^{^{79}\} https://reports.aashe.org/institutions/university-of-colorado-at-boulder-co/report/2018-03-23/AC/curriculum/AC-new points and the control of the colorado-at-boulder-co/report/2018-03-23/AC/curriculum/AC-new points and the colorado-at-boulder-co/report/2018-03-23/AC/$

⁸⁰ https://reports.aashe.org/institutions/university-of-illinois-urbana-champaign-il/report/2019-02-27/AC/curriculum/AC-7/

⁸¹ https://reports.aashe.org/institutions/university-of-iowa-ia/report/2018-07-24/EN/campus-engagement/EN-1/

⁸² https://reports.aashe.org/institutions/cornell-university-ny/report/2020-03-05/EN/campus-engagement/EN-1/

 $^{^{83}\} https://reports.aashe.org/institutions/university-of-washington-seattle-wa/report/2018-10-12/EN/campus-engagement/EN-1/$

Primary	Secondary
Academic Affairs	Athletics
	Faculty Experts as Appropriate
	Office of Sustainability
	Student Affairs
	Student Affairs – CFLI
	Student Subcommittee Members
	• VCRGE

Sequence	Program / Project	Primary Implementation	Status	Cost	FTE	Timeframe	Stakeholder Readiness
1a	Designate the Office of Sustainability as a departmental sponsor for student organizations	Student Affairs - CFLI	In Progress	\$	*	Short	©
1b	Develop an inventory of campus resources and operations experts and processes for facilitating and executing campus as a living lab coursework	Office of Sustainability	In Progress	\$	**	Short	©
1c	Deliver survey to students, faculty, and staff assessing UW-Madison's sustainability literacy	Office of Sustainability	In Progress	\$	*	Short	©
1d	Develop a sustainability research guide through the libraries	Academic Affairs	Not Started	\$	*	Short	©
1e	Develop guidelines and materials to support sustainable study abroad	Academic Affairs	In Progress	\$	*	Short	©
1f	Incorporate sustainability into Athletics life skills training	Athletics	Not Started	\$	*	Short	(1)
2a	Hub (virtual, then physical) for co-curricular sustainability activities and student organizations	Student Affairs	Not Started	\$\$	**	Medium	(1)
2b	Develop training materials for RSO leaders for how to consider sustainability in their organizations and events	Student Affairs - CFLI	Not Started	\$	*	Medium	©
2c	Include sustainability professional development and support through the new Center for Teaching, Learning, and Mentoring (including Madison Teaching and Learning Excellence programs and cohorts)	Academic Affairs / VCGRE	Not Started	\$	**	Medium	(2)
2d	Include sustainability as a topic area in the annual teaching and learning symposium	Academic Affairs	Not Started	\$	*	Medium	:
3a	Campus-wide process to ensure that students participate in at least one form of sustainability learning	Academic Affairs / Student Affairs / VCGRE	Not Started	\$\$	*	Medium	8

Sequence	Program / Project	Primary Implementation	Status	Cost	FTE	Timeframe	Stakeholder Readiness
3b	Partner with the Center for Teaching, Learning, and Mentoring to create faculty and staff resources and incentives for incorporating sustainability in new and existing courses to meet sustainability course attribute requirements	Academic Affairs / VCGRE	Not Started	\$\$	*	Long	<u>:</u>

Table 26. Expand Sustainability Learning – Action Items Analysis

- TBD: Sustainability literacy survey results
- Percent of courses that include sustainability learning outcomes
- Percent of academic departments that offer courses that include sustainability learning outcomes
- Funding (in dollars) available to support sustainability course material development
- Percent of faculty and teaching staff who have participated in sustainability-focused professional development
- Number of sustainability related student organizations

Create Sustainable Facilities and Infrastructure: Plan and design for a sustainable and regenerative university; Build and operate a sustainable campus

Developing a consistent methodology for incorporating sustainability into campus planning and design can ensure that a university provides safe, healthy, and productive spaces for the campus community and contributes to the regeneration of the ecosystem in which it is embedded. Campus and facilities development includes both indoor and outdoor infrastructure, from buildings and transportation to green spaces and more. A sustainable approach to development also incorporates consideration of indigenous communities to ensure that difficult cultural histories are redressed and that the immense knowledge of those communities is taken into account.

The infrastructure of a campus is often the largest source of energy use, water use, and greenhouse gas emissions for a university. Yet UW–Madison lacks comprehensive requirements for incorporating sustainability practices and principles into building and landscape operations and maintenance. This action group will seek to address these lacks, helping the university to build and maintain infrastructure that provides a safe and healthy indoor environment for inhabitants while simultaneously mitigating ecosystem impacts and incorporating local cultural histories.

Related STARS⁸⁴ Credit(s)

- OP-2: Greenhouse Gas Emissions
- OP-3: Building Design and Construction
- OP-4: Building Operations and Maintenance
- OP-5: Building Energy Efficiency
- OP-9: Landscape Management
- OP-10: Biodiversity
- OP-21: Water Use
- OP-22: Rainwater Management
- PA-2: Sustainability Planning
- Future credit impacts⁸⁵

⁸⁴ https://stars.aashe.org/resources-support/technical-manual/

⁸⁵ AC-8; OP-1; OP-6; OP-17; OP-18; OP-19; PA-14; PA-15

Relevant Initiatives

- 2015 Campus Master Plan⁸⁶
- Second Nature Resilience Commitment⁸⁷
- Division of Facilities Development and Maintenance Sustainability Guidelines for Capital Projects⁸⁸

Peer Best Practices

- University of Colorado Boulder: All new and renovated facilities shall attain LEED Gold "Plus" certification, which is diving more deeply into the energy and water conservation categories of the LEED requirements, including projected performance at a minimum level of 45 percent better than ASHRAE standards.⁸⁹
- University of California Davis: UC Davis Grounds maintains a diverse landscape filled with an ever-changing plant palate. Those changes are driven by campus growth, climate change and an ever-changing customer need. When Grounds plants, all plantings are approved by the Campus Architect to make sure that the planting plans are sustainable. UC Davis also has plants and plantings that have become internally designated as heritage. These plantings, ranging in age from 60+ years, help to define the campus landscape as sustainable. Once established, Grounds works hard to keep invasive plants from entering the landscapes utilizing herbicides, hand pulling and other cultural and mechanical practices.
- University of California Berkeley: For all major projects, the green building design and
 construction requirements are posted in the department's construction and contract requirements
 website and incorporated into design and construction and contract documents. Regular
 sustainability meetings/charettes with the entire project team and campus staff are held during
 project design phases.⁹⁰
- University of Georgia: 62.14% of building space is certified under a green building rating system for the operations and maintenance of existing buildings. Additionally, 100% of uncertified building space is maintained in accordance with a published indoor air quality (IAQ) management policy or protocol and published green cleaning policy, program or contract.
- University of Texas at Austin: UT Austin operates a centrally controlled smart irrigation system which reduces water waste; and aims to utilize reclaimed & rain water where applicable. The university strives for sustainable designs on all capital projects by use of design and construction standards & specifications.⁹¹

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⁸⁶ https://cpla.fpm.wisc.edu/planning/campus-master-plans/

⁸⁷ https://sustainability.wisc.edu/strategic-initiatives/resilience-commitment/

 $^{{}^{88}\}text{https://doa.wi.gov/DFDM_Documents/MasterSpecs/Sustainability/DFDM\%20Sustainability\%20Guidelines\%20for\%20Capital\%20Projects\%20-\%20V2\%20-\%20Sept\%202020.pdf}$

⁸⁹ https://reports.aashe.org/institutions/university-of-colorado-at-boulder-co/report/2018-03-23/OP/buildings/OP-4/

⁹⁰ https://reports.aashe.org/institutions/university-of-california-berkeley-ca/report/2018-08-16/OP/buildings/OP-4/

⁹¹ https://pmcservices.utexas.edu/DCS-Division-32-EXTERIOR-IMPROVEMENTS

Action Group

Primary	Secondary
Finance and Administration – FP&M	Academic Affairs
	• Athletics
	 Faculty Experts as Appropriate
	• Finance and Administration – FP&M: CPLA
	• Finance and Administration – FP&M:
	Physical Plant
	• Finance and Administration – FP&M: Project
	Delivery
	 Finance and Administration – University
	Housing
	Office of Sustainability
	Student Subcommittee Members

Sequence	Program / Project	Primary Implementation	Status	Cost	FTE	Timeframe	Stakeholder Readiness
1a	Implement the Sustainable Facilities and Infrastructure program that prioritizes learning and knowledge while pursuing industry leading sustainable design for facilities and campus planning	Finance and Administration - FP&M: Project Delivery	In Progress	Var	**	Short	=
1b	Implement a consistent, multi-attribute building operations policy that at a minimum addresses sub-metering, water use, energy use, product sourcing, cleaning, and indoor air quality	Finance and Administration – FP&M: Physical Plant	In Progress	\$	**	Medium	=
1c	Establish an institutional definition of local food and plan for increasing procurement	Finance and Administration - University Housing	In Progress	\$\$	*	Short	©
1d	Implement an integrated pest management program for main campus and athletics	Finance and Administration – FP&M: Physical Plant & Athletics	In Progress	\$	**	Medium	©
2a	Incorporate assessments of classroom spaces from students, staff, and faculty (e.g., end of semester evaluation)	Academic Affairs	Not Started	\$	**	Medium	<u> </u>
2b	Plan and manage campus landscapes with native plantings	Finance and Administration – FP&M: CPLA	Not Started	\$	*	Medium	©
2c	Expanded artistic and cultural attributes of buildings to engender creativity and create areas of respite	Finance and Administration – FP&M: Physical Plant	Not Started	\$	**	Medium	(1)
2d	Develop processes for incorporating applied research and technology transfer into new planning and new building design	Finance and Administration - FP&M: Project Delivery	Not Started	\$	*	Medium	(2)
3a	Establish a large (>\$1M) revolving fund for university sustainable operational improvements	Finance and Administration	Not Started	\$\$\$	**	Long	(2)

Sequence	Program / Project	Primary Implementation	Status	Cost	FTE	Timeframe	Stakeholder Readiness
3b	Complete Bee campus certification	Office of Sustainability	In Progress	\$	**	Medium	(:)
3c	Complete Tree campus certification	Office of Sustainability	In Progress	\$	**	Medium	<u>:</u>

Table 27. Create Sustainable Facilities and Infrastructure – Action Items Analysis

Success Metrics

- Percent of new building floor space built in accordance with the new building sustainability design process
- Percent of landscape managed under a program the uses only ecologically preferable materials
- Percent of building space managed under a multi-attribute building operations policy
- Energy use per square foot of building space
- Energy use per campus user
- Percent of food purchases that are plant-based and/or sustainably/ethically produced
- Water use per square foot of building space
- Water use per campus user

Pursue Carbon Neutrality

Pursuing carbon neutrality requires both minimizing carbon emissions and maximizing carbon sinks. While these efforts cut across almost every SAC priority, this action group will comprise two primary action areas, one focused on minimizing carbon emissions (frequently referred to as mitigation) and the second focused on maximizing carbon sinks (frequently referred to as adaptation).

To accomplish carbon mitigation strategies, the action group will be responsible for overseeing a clean energy framework, including reviewing our greenhouse gas emissions inventory and disclosure, designing, and implementing a strategic energy management program for campus facilities; assessing opportunities for renewable energy, energy storage and beneficial electrification to the campus energy mix; and supporting efficient and electric transportation options. Long-term plans will be developed to decarbonize campus utilities while keeping them safe, reliable, and affordable. Successfully implementing opportunities to improve energy performance at facilities, throughout campus operations, and within transportation will showcase innovation, create a more connected campus, save operating expenses, and improve the occupant experience for faculty, staff and students. The current energy systems have served campus for over 100 years, the action groups will envision campus energy systems for the next 100 years.

To accomplish adaptation strategies, the action group will be responsible for overseeing a natural capital study that will identify current assets, risks, and future needs for a changing natural environment. Within the main campus and UW–Madison properties throughout the state, a variety of natural ecosystems contribute to carbon sequestration and provide valuable ecosystem services, such as water conservation, shading, and animal habitats. A natural capital study will investigate quantifiable benefits of carbon sequestration and other positive impacts from natural areas and opportunities to bolster regenerative and carbon positive ecosystems. We aspire to collaborate with campus representatives from some of Wisconsin's Native Nations indigenous peoples to learn from ancient wisdom and determine appropriate opportunities to incorporate such practices.

Related STARS⁹² Credit(s)

- EN-10: Community Partnerships
- OP-1: Emissions Inventory and Disclosure
- OP-2: Greenhouse Gas Emissions
- OP-5: Building Energy Efficiency
- OP-6: Clean and Renewable Energy
- OP-9: Landscape Management
- OP-10: Biodiversity
- OP-15: Campus Fleet
- OP-16: Commute Modal Split
- OP-17: Support for Sustainable Transportation
- OP-22: Rainwater Management
- PA-2: Sustainability Planning

Relevant Initiatives

- 2017 Faculty Senate 2699
- 2017 Academic Staff Assembly 666
- 2017 Associated Students of Madison (ASM) 24-0123-03
- 2019 Sustainable Madison Committee, 100% Renewable Madison
- 2019 Governor Evers' Executive Order No. 38 (100% Carbon-Free electricity by 2050)⁹³
- 2019 Second Nature Resilience Commitment⁹⁴
- 2020 Dane County Climate Action Plan
- 2020 Wisconsin Governor's Task Force on Climate Change
- 2020 ASM 27-1117-01
- 2021 Wisconsin Clean Energy Plan (in development)

Peer Best Practices

- **Stanford University**: 55% of energy use is from clean and renewable sources including purchasing energy from a 67MW solar development while working to construct an 88MW solar generating plant to meet 100% of electricity needs⁹⁵
- **University of Michigan**: Final recommendations from the Carbon Neutrality Commission has set goals of carbon neutrality for Scope 1 and Scope 2 emissions⁹⁶ by 2025
- University of Missouri: 60% of energy use is from clean and renewable sources including an on campus 14MW biomass fueled boiler; the biomass boiler also includes a solar thermal hot water system to heat makeup water for the plant's boilers⁹⁷

Action Group

Realize Clean Energy

Reunze Cleun Energy		
Primary	Seco	ondary
Finance and Administration – FP&M: Energy &	•]	Faculty Experts as Appropriate
Utilities	ł	

⁹² https://stars.aashe.org/resources-support/technical-manual/

 $https://content.govdelivery.com/attachments/WIGOV/2019/08/16/file_attachments/1268023/EO\%20038\%20Clean\%20Energy.pdf$

⁹⁴ https://sustainability.wisc.edu/strategic-initiatives/resilience-commitment/

⁹⁵ https://reports.aashe.org/institutions/stanford-university-ca/report/2019-02-22/OP/energy/OP-6/

⁹⁶ https://record.umich.edu/articles/carbon-neutrality-commission-submits-final-recommendations/

⁹⁷ https://reports.aashe.org/institutions/university-of-missouri-mo/report/2018-02-16/OP/energy/OP-6/

Finance and Administration – FP&M
• Finance and Administration – FP&M: Physical
Plant
• Finance and Administration – FP&M:
Transportation Services
Student Subcommittee Members
• VCRGE

Develop Natural Capital

Primary	Secondary
Finance and Administration – FP&M: CPLA	Faculty Experts as Appropriate
	• Finance and Administration – FP&M: Space
	Management
	Student Subcommittee Members

Sequence Realize Clea	Program / Project	Primary Implementation	Status	Cost	FTE	Timeframe	Stakeholder Readiness
1a	Engage electric utilities for renewable energy programs/projects	Finance and Administration – FP&M: Energy & Utilities	In progress	\$	*	Short	•
1b	Implement strategic energy management pilot	Finance and Administration – FP&M: Physical Plant	In progress	\$	*	Short	©
1c	Develop and implement vehicle & equipment efficiency and electrification policies and pilot implementation	Finance and Administration – FP&M: Transportation Services	Planning	\$	*	Short	©
2a	Conduct a renewable energy assessment of main campus and outlying properties	Finance and Administration – FP&M: Energy & Utilities	Planning	\$\$	**	Medium	©
2b	Develop utility plan to promote campus resilience and utility decarbonization	Finance and Administration – FP&M: Energy & Utilities	Not started	\$\$	**	Medium	(2)
3a	Develop campus facility and operations energy innovation initiative	Finance and Administration – FP&M	Not started	\$\$	*	Medium	©
3b	Identify needs for technical studies to promote research & development opportunities using campus facilities	VCGRE	Not started	\$	*	Medium	©

Sequence	Program / Project	Primary Implementation	Status	Cost	FTE	Timeframe	Stakeholder Readiness
Develop Nat	urai Capitai						
1	Quantify and incorporate natural capital assets into campus GHG emissions inventory	Finance and Administration – FP&M: CPLA	Not started	\$\$	**	Medium	(3)
2	Plan and manage off-campus properties for carbon sequestration	Finance and Administration – FP&M: Space Management	Not Started	\$\$	*	Medium	

Table 28. Pursue Carbon Neutrality – Action Items Analysis

Success Metrics

- Square feet of facilities assessed for strategic energy management
- Acreage of outlying properties assessed for renewable energy
- Number of vehicles / fleet equipment electrified
- Energy use per square foot of building space
- Energy use per campus user
- Percent of total energy use from imported clean and renewable sources
- Percent of total energy use from on-site generated clean and renewable sources
- Greenhouse gas emissions per campus user
- Number of Scope 3 emission categories and carbon sink categories included in the greenhouse gas emission inventory
- A published plan to includes measurable sustainability objectives and/or include the integrated concept of sustainability (STARS PA-2)

Achieve Zero Waste

Conducting sustainable resource management practices at UW–Madison is limited in many respects. For example, resource collection is managed by several campus units, there are inconsistent signage and disposal requirements, and there is a lack of procurement requirements that consider resource recovery and packaging. Zero Waste is "the conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health." Reducing the generation of waste also reduces the flow of waste to incinerators and landfills, which produce greenhouse gas emissions, can contaminate air and groundwater supplies, and tend to have disproportionate negative impacts on low-income communities. Source reduction and waste diversion also save costly landfill and hauling service fees. In addition, waste reduction campaigns can engage the entire campus community in contributing to a tangible sustainability goal. This action group will address a range of initiatives to help UW–Madison fulfill the Zero Waste target and improve its resource handling processes.

Related STARS⁹⁹ Credit(s)

- EN 4: Outreach Materials and Publications
- EN 10: Community Partnerships
- OP 1: Emissions Inventory and Disclosure
- OP 2: Greenhouse Gas Emissions
- OP 8: Sustainable Dining
- OP 11: Sustainable Procurement
- OP 12: Electronics Purchasing
- OP 13: Cleaning and Janitorial Purchasing
- OP 14: Office Paper Purchasing
- OP 18: Waste Minimization and Diversion
- OP 19: Construction and Demolition Waste Diversion
- OP 20: Hazardous Waste Management
- PA 2: Sustainability Planning
- Other indirect credit impacts¹⁰⁰

Relevant Initiatives

- 2020-2025 Strategic Framework¹⁰¹
- 2015 Campus Master Plan

Sustainability Advisory Council DRAFT Report

⁹⁸ Zero Waste International Alliance Zero Waste Definition: http://zwia.org/zero-waste-definition/

⁹⁹ https://stars.aashe.org/resources-support/technical-manual/

¹⁰⁰ AC-8 ,AC-9; AC-10; EN-2; EN-3; EN-7; EN-8; EN-11; OP-3; OP-4; OP-7; OP-9; PA-2; PA-14, PA-15; Innovation Credits

¹⁰¹ https://strategicframework.wisc.edu/

Peer Best Practices

- University of Maryland, College Park: The University of Maryland has adopted the Mini Bin trash collection program. All university employee work stations have a mini trash can that the campus employee must empty into a communal trash can and a recycling bin that university housekeeper's service. This program encourages all university staff to be mindful of all the waste they are generating and be responsible for properly disposing of it themselves. All administrative and academic buildings on campus have adopted this program. In addition, twice a year Facilities Management conducts internal waste audits using campus student groups. These internal waste audits help to teach students about proper waste separation and to gauge the overall effectiveness of the waste diversion program. 102
- University of California, Berkeley: Our campus zero waste initiative has extensive stakeholder engagement through the official Zero Waste Working Group and the recently formed Single-Use Plastic Elimination Working Group. The Zero Waste Working Group includes Representatives from zero waste partners and different campus areas and departments (students, faculty, staff), including representatives from buildings that have implemented the zero waste building program. This group meets twice yearly to share and review campus zero waste efforts and needs. The Single-Use Plastic Elimination Working Group is made up of diverse stakeholders, helping develop enabling strategies in purchasing contracts and developing a roadmap to the 2030 target. The Zero Waste Research Center (ZWRC) researches and implements upstream strategies for reducing campus waste, with a focus on purchasing, redesigning products, creating behavior change incentives, and instituting closed-loop circular economy waste systems.¹⁰³
- University of Utah: Zero waste is the focus of the U Bring Your Own campaign (UBYO). The campaign—a partnership between Sustainability, student government, campus bookstore, and Pepsi—aims to make zero waste more accessible by focusing on five key items to bring to campus. Those items are: grocery bag, to-go container, utensil kit, water bottle, and hot beverage cup. Utensil kits funded by Pepsi, #UBYO stickers, and lamppost banners featuring the five items remind the campus community that waste reduction matters. The University of Utah is also part of Pac-12 Team Green. During fall football games, the student government and Sustainability Office work to collect recyclable materials in tailgate areas from fans. Additionally, each fall and spring semester, the university participates in the Pac-12 Zero Waste Challenge. In fall 2019, the university did its first-ever food waste collection at a football game as part of a BECAUSE PLANET branded campaign. 104

 $^{^{102}\} https://reports.aashe.org/institutions/university-of-maryland-college-park-md/report/2019-02-28/OP/waste/OP-19$

¹⁰³ https://reports.aashe.org/institutions/university-of-california-berkeley-ca/report/2021-03-04/OP/waste/OP-18/

¹⁰⁴ https://reports.aashe.org/institutions/university-of-utah-ut/report/2020-10-21/OP/waste/OP-18/

Action Group

Primary	Secondary
Office of Sustainability	• Athletics
	• Finance and Administration – Business
	Services
	• Finance and Administration – FP&M: Physical
	Plant
	• Finance and Administration – University
	Housing
	Student Affairs
	• Student Affairs – Wisconsin Unions
	Student Subcommittee Members

Sequence	Program / Project	Primary Implementation	Status	Cost	FTE	Timeframe	Stakeholder Readiness
1	Complete and implement the zero waste plan for the main campus	Athletics / Finance and Administration - FP&M: Physical Plant / Finance and Administration – University Housing / Student Affairs – Wisconsin Unions	In Progress	\$	**	Short	☺
2a	Implement life cycle cost analysis procurement standards	Finance and Administration - Business Services	Not Started	\$	**	Medium	<u>:</u>
2b	Policies for improving the sustainability of campus events	Finance and Administration / Student Affairs	Not Started	\$	**	Medium	<u></u>

Table 29. Achieve Zero Waste – Action Items Analysis

Success Metrics

- Total operational waste (tons) generated per weighted campus user
- Percent of operational waste diverted from landfill or incinerator
- Percent of construction and demolition waste diverted from landfill or incinerator

*Legend

Var Variable depending upon scope of action

Cost:			Timeframe:
		· ·	

\$ Less than \$50,000 Short 6 Months or Less
\$\$ Between \$50,000 and \$500,000 Medium 6 Months to 3 Years
\$\$\$ More Than \$500,000 Long More Than 3 Years

FTE: Stakeholder Readiness:

* Minimal to None © Most Stakeholders are Supportive

** 0.5 FTE or Less © Some Stakeholders are Supportive

** More Than 0.5 FTE © Few Stakeholders are Supportive